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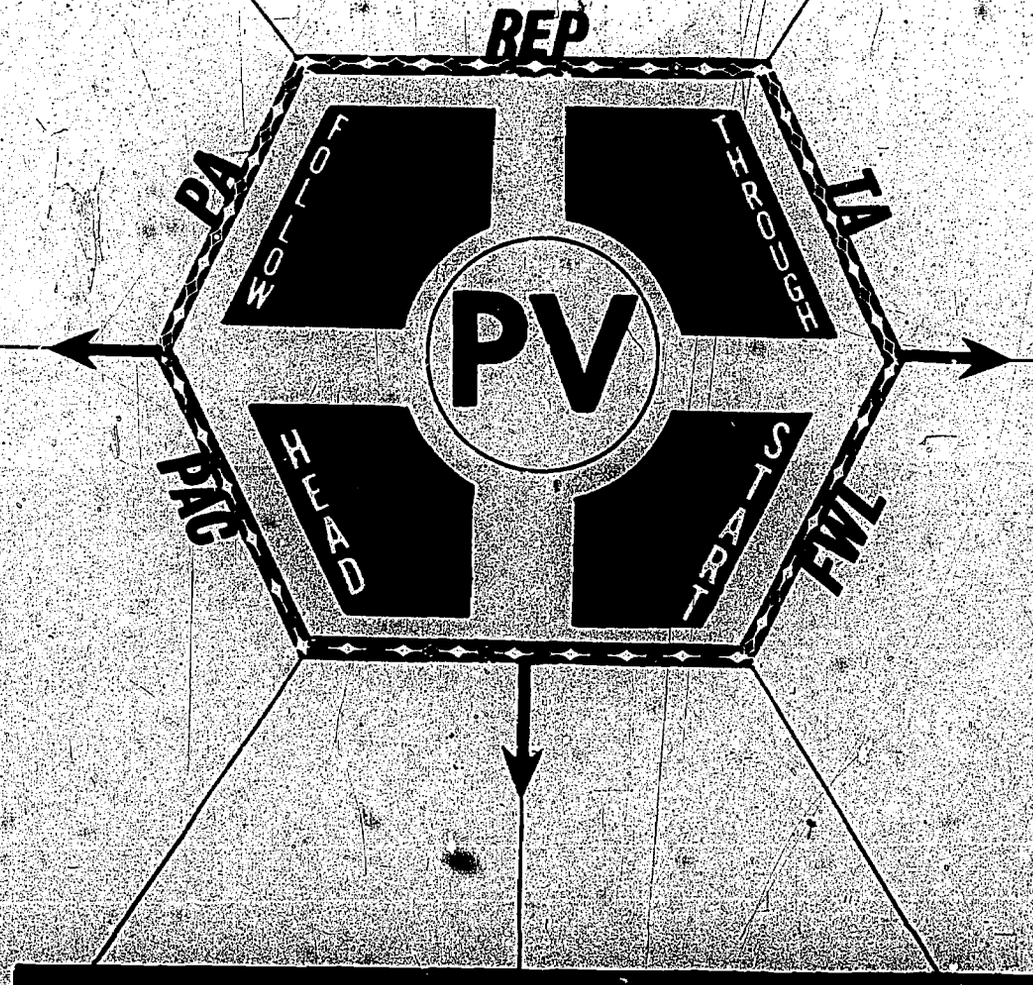
ABSTRACT

This report describes and evaluates the implementation of the Far West Laboratory's Responsive Educational Program (REP) in four communities participating in the Head Start and Follow Through "Planned Variation" experiment. The purposes of the report are: (1) to evaluate a particular implementation effort, and (2) to devise a new framework for such an evaluation. Separate sections are devoted to implementation evaluation as related to the Program Advisor, the Community and the School System, the Classroom Process, Parent Participation, Child Services, and the Child. Several evaluation instruments are described. Data tables are interspersed throughout the report and appendices include supporting information. (SET)

IMPLEMENTATION OF THE RESPONSIVE PROGRAM



A REPORT ON FOUR PLANNED VARIATION COMMUNITIES

ABSTRACT

Title: Implementation of the Responsive Program:
A Report on Four Planned Variation Communities

Authors: Nicholas F. Rayder, Pierina Ng, and Anne Rhodes

Date: March, 1973

I. Purpose:

This report describes and evaluates the implementation of the Laboratory's Responsive Educational Program (REP) in four participating Planned Variation communities. Planned Variation (PV) is a comprehensive educational experiment designed to co-ordinate classes progressing from Head Start (pre-school) to Follow Through (K-3) so as to provide participating children the continuity of learning within a single federally-funded instructional model for their first five years of formal schooling. In the process of carrying out this evaluation, a new approach and framework for evaluation is proposed and exemplified.

II. Procedures:

As an educational evaluation, this effort breaks ground in several ways.

- Data reported come from a variety of research and evaluation situations in four different communities, and are treated in the context of each individual community, as well as summarized across all four.

- The evaluation deals with the implementation process and results per se, as well as with outcome variables in the context of implementation success.

- The assessment criteria are formulated to reflect the stated goals of the program evaluated.

- In line with program objectives, the outcome variables are specified in terms of the various components of the educational process, not in reference to the child alone.

- Again in line with the program's philosophy, the child-outcome variables are stated in terms of more general learning and experience criteria, not standardized tests alone.

- To meet the needs of some of these procedural innovations, some new evaluation concepts and instruments are devised and successfully applied. Demographic, economic, and classroom data are interpreted in terms of indicators that relate to three central notions especially relevant to REP: Ability to Attend (ATA), Ability to Respond (ATR), and Form of Experience (FOE).

The experimental treatment is the cumulative implementation of the REP program. Its objectives are:

- the educational institution should respond to parents and to children;

- any formal educational program should provide a variety of alternatives to meet the needs of parents and their children;

- the educational program should be responsive to the learner's background,

culture, and life style; and

- schools must consider what a child has learned before school entry.

Primary classroom objectives of the REP include helping children develop healthy self-concepts and helping children develop their intellectual abilities. The REP permits the learner to explore freely, and is structured so he is likely to make interconnected discoveries about the physical, cultural, and social world. Principles supporting the REP approach include:

- children learn at different rates;

- children learn at different times;

- children learn best when interested in what they're learning.

The Laboratory's delivery system for the REP uses an in-service training program for teachers/teaching assistants working through a Program Advisor (PA). In this report, separate sections are devoted to implementation evaluation as related to the PA, the Community and the School System, the Classroom Process, Parent Participation, Child Services, and the Child.

III. Findings:

The Program Advisor's ability to implement the REP via in-service training for teaching personnel is directly related to the quality of the Laboratory's training program and materials.

An examination of 13 forces impinging on teacher behavior indicates that PA's exert a strong positive influence, with the teaching assistant as a second positive force; these patterns reflect the operation of the delivery system.

Teacher turnover rates affect PA-conducted training. In-service training must be individualized. District-wide teacher contracts can complicate in-service programming.

Children in PV classrooms differ from the general population of children in the community. Through addition of teaching assistants from backgrounds similar to those of the children served, the PV Program has improved the ethnic balance between adults and children in the classroom.

Parent participation in the actual teaching/learning process is a key factor. Stanford Research Institute data shows that all four REP PV communities have more parent participation and involvement than was found in comparison communities selected by them.

As to Form of Experience (FOE), children in REP classrooms initiate more interaction with adults than occurs in non-REP classrooms. In the REP there is significantly more self-teaching and also more "child-teaching-another-child" behavior. In the REP adults use significantly more "positive" correction statements in interactions with children.

In REP classrooms the child's in-school experiences are enjoyable and the child's knowledge base has increased. Attendance for REP children is significantly higher than for a comparison group. Standardized tests (PSI, Boehm, Raven's, Wechsler) show satisfactory achievement levels for REP children as compared to national norms.

IV. Conclusions:

- The Planned Variation Program is effective in delivering the REP to communities, though there are areas where the delivery system needs improvement.
- The PA and the teaching assistant are perceived as important positive influences on the teacher's behavior.
- The PV experiment has succeeded in changing the ethnic disparity between the teachers and the learners in the classroom.
- REP classroom processes that have been implemented directly affect the experiences children undergo there.
- The REP has positive spin-off effects in each of the four communities discussed.
- Parents believe they are competent in making educational decisions.
- For the future, the report proposes these implications and directions:
  - The concepts of Ability to Attend and Ability to Respond should receive major attention in research and evaluation of the REP.
  - Form of Experience criteria imply variables that must be explored and analyzed.
  - Comprehensive community case studies, using a variety of data from diverse sources, are needed.
  - More and better instruments to measure implementation are needed.
  - Studies of longitudinal development of children over five or more years must be planned and carried out.
  - Parent impact on the educational community must be examined in greater depth.

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The opinions expressed do not necessarily reflect the position or policy of the Office of Education and no official endorsement by the Office of Education should be inferred.

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IMPLEMENTATION OF THE RESPONSIVE PROGRAM

A Report on Four Planned Variation Communities

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TABLE OF CONTENTS

TABLES

FIGURES

CHAPTER 1

INTRODUCTION

Scope and Purpose

This is a report on the implementation of the Laboratory's Responsive Educational Program (REP) in four communities participating in the Head Start and Follow Through "Planned Variation" experiment. Its purpose is twofold: 1) to evaluate a particular implementation effort, and 2) to devise a new framework for such an evaluation.

First, to meet the needs of the particular evaluation, we will make a special effort to look at socio-economic-environmental data, along with the more traditional academic material. This is a logical consequence of the community-oriented philosophy of REP, and is also mandated by the fact that we are looking concurrently at several communities of diverse geographical and social outlook.

In the past, a wealth of research and evaluation data have been collected on participating Head Start and Follow Through communities. But for the most part these have been isolated enterprises: little effort has as yet been directed toward identifying, analyzing, and summarizing the breadth of information collected on any one Planned Variation community. For the communities participating in REP, a considerable ensemble of data is presented in this report (see chart in Appendix A). Unfortunately, this data cannot be dealt with in this report, except in a suggestive, heuristic fashion. We will make some cross-comparisons and point up relevant factors and their significance for the education of the child. But no definitive analyses will be attempted.

The second objective of this report involves a redefinition of certain evaluation concepts. To carry out an evaluation---in particular this evaluation--a frame of reference is a must. Not to state what it is, is to assume it. For the evaluation procedures must be geared to the particular program, and we often find that programs are predicated upon specific evaluation concepts. Moreover the

philosophy underlying the REP is sufficiently distinctive that the usual criteria would be inadequate or inappropriate. A broader base is needed for defining, reporting, and evaluating program outcomes. Previously, reports on program effectiveness have concentrated on child outcome data, and much of this data has turned out to be of the traditional standardized test variety. In contrast, this report focuses on implementation. A deeper understanding of the implementation process is advocated. Where child data are reported, they should be viewed within this broader context of evaluation.

To form this broader base for evaluation, new concepts and new assessment techniques must be used. Two new constructs in particular - the family and community's Ability to Attend to the child (ATA) and the school system's Abiljty to Respond to him (ATR) - have been developed by the Laboratory to fill just this need, and will be discussed extensively in chapter 3. Some new evaluation techniques that enable us to expand the conceptual base of evaluation are the Educational Forces Inventory (EFI) and the related Force Field Analysis (FFA), also used extensively and reported in chapters 2 and 4. Other tools pertinent to this broader base of evaluation, and developed and/or used by the Laboratory for this purpose are the Classroom Observation Inventory developed by Stanford Research Institute and the Purdue Teacher Opinionaire (chapter 4), and the Parent Interviews (chapter 5). In using these instruments we are departing from the usual narrow focus on child outcome variables and dealing with program effects or outcomes in other areas. However, our discussions of these tools are necessarily brief----- essentially just what is needed for this particular evaluation. In part they have been introduced in previous papers, and in part they need to be dealt with separately, in reports for which resources will have to be allocated in the future.

This report reflects a variety of intensive efforts that pursued both these goals. However, because of the complexity of the problems and the limited resources available, the report does not make conclusive statements of program success. The report can, however, contribute to identification of some new directions for future evaluation.

Notes to Aid the Reader

Throughout the report, we will use the following acronyms:

HS = Head Start

FT = Follow Through

PV = Planned Variation

REP = Responsive Educational Program or Responsive Program

PAC = Parent Advisory Committee

PA = Program Advisor

TA = Teaching Assistant

FWL = Far West Laboratory for Educational Research and Development

Planned Variation in Head Start and Follow Through

Planned Variation in Head Start and Follow Through is a comprehensive educational program built upon the foundation of the various Head Start and Follow Through educational models. Both Head Start, founded in 1965, and Follow Through, established in 1967, were designed as "compensatory education" programs, directed toward off-setting the negative effects of poverty on a child's educational attainments and potential. Head Start provides special educational experiences for pre-school children from low-income families; Follow Through, as an outgrowth of Head Start, extends these services to the lower primary school, kindergarten through third grade.

It was primarily evaluations of the Head Start program which pointed to the need for a Follow Through program. Though Head Start produced a positive effect on pre-school children's achievement during their year of participation, it was found that, on entering the public school system, these children did not sustain the rate of development (Bissell, 1972). In order to provide Head Start "graduates" with additional support in the elementary years, an amendment to the Economic Opportunity Act in December, 1967, officially authorized:

> A program to be known as "Follow Through" focused primarily on children in kindergarten and elementary school who were primarily enrolled in Head Start or similar programs and designed to provide comprehensive services and parent participation activities...which the Director finds will aid in the continued development of children to their full potential.

As a means of implementing the Follow Through program, individuals, educational institutions, and private organizations that had worked extensively in early childhood education were asked to submit to Follow Through proposals of instructional approaches. These were evaluated on the quality of their well-developed ideas for new instructional strategies, and 14 approaches were initially identified for implementation in the Follow Through program.

Shortly after Follow Through was launched, it became apparent that there was a need to arrange for children to experience the same educational model in both Head Start and Follow Through. Since the two programs are administered by different federal agencies, no provision had been made to assure that there was a continuity of type of educational experience from Head Start to Follow Through. Thus, the notion of a Head Start Planned Variation Program where Head Start children in a specific model would flow into Follow Through classrooms utilizing the same model was developed. In 1969, eight of the original fourteen Follow Through sponsors implemented Planned Variation programs in a limited number of their Follow Through

districts. Planned Variation in Head Start and Follow Through, by providing children with four continuous years of a systematic educational experience, represents the most comprehensive educational experiment now being conducted by the federal government.

This report deals with the Responsive Educational Program which was chosen as one of the models to be developed and implemented with federal funding support.

The Responsive Educational Program

Assumptions and Objectives

The Responsive Program had its origin in development work begun at the New Nursery School in Greeley, Colorado; it has since been extensively revised and expanded by the Early Childhood Division of the Laboratory.

The Responsive Program is based on several fundamental assumptions about the education of young children. The first is the notion that the family has the right and the responsibility to participate in the education of its children. The educational institution has the responsibility to involve and respond to the parents.

A second assumption is that any formal educational program should provide a variety of alternatives to meet the needs of the parents and their children. For example, some parents of pre-school children will want or need day-long, year-round day care service for their children; others will need three to five hours in a classroom setting; still others will need assistance in working with their children at home.

A third assumption is that the educational program should be responsive to the learner's background, culture, and life style. For example, if a child is Mexican-American and speaks Spanish, the educational program should respond by

using materials that are relevant to his background and that reflect his cultural heritage. The language of instruction should include Spanish whether in a bilingual program or in a program in which English is treated as a second language.

These assumptions lead to one of the major goals of the program: to help maintain and develop a pluralistic society. Instead of the "melting pot" goal of blending differing groups into a single smooth mass, the aim should be to develop a "tossed salad" of different cultures and life styles. The ideal of the "tossed salad" is to enhance the values and uniqueness of the different groups so that they complement each other. Because the objectives of a pluralistic society differ from traditional objectives, there are three major educational implications.

1. The public schools must take into account what learning children of various socio-cultural backgrounds bring into the classroom.
2. The schools must build on the different learning-to-learn styles children have developed.
3. The schools must be more responsive to individual children and their parents.

The program represents an effort to create a learning environment that is truly responsive to all children. The major emphasis is on "learning how to learn," on developing problem-solving abilities. The Responsive Program emphasizes that problem-solving is the essence of learning.

In accordance with this notion, the primary objectives for the classroom are:

1. To help children develop a healthy self-concept.
2. To help children develop their intellectual abilities.

A child has a healthy self-concept in relationship to learning and school if:

1. He likes himself and his people;
2. He believes that what he thinks, says, and does make a difference;
3. He believes that he can be successful in school;
4. He believes that he can solve a variety of problems;

5. He has a realistic estimate of his own abilities and limitations;

6. He expresses feelings of pleasure and enjoyment.

A child is developing his intellectual ability if he can solve a variety of problems. In order to solve problems, the learner must develop:

1. His senses and perceptions because the senses are the source of data for the thought process;

2. His language ability because language is a tool of the thought process;

3. His concept-formation ability because he needs to be able to deal with abstractions and to classify information to organize thought.

These two objectives of the Responsive Program, the development of a healthy self-concept and of intellectual abilities, are interrelated and interdependent. In order to learn, a person must have a basic self-confidence, see himself as a worthwhile person, and recognize his own ability to learn.

This basic self-confidence comes from having a healthy self-concept. The healthy self-concept is therefore crucial to the development of intellectual skills. The development of intellectual skills nourishes and promotes the growth of the self-concept.

As the name "Responsive" implies, the program seeks to develop an environment that responds to children as it moves toward achieving the objectives stated above.

The principles supporting a Responsive approach are:

1. Children learn at different rates.

2. Children learn in different ways.

3. Children learn best when they are interested in what they are learning.

In accordance with these principles, a Responsive learning environment is one that, by providing varied experiences:

1. Permits the learner to explore freely, within the structure provided by the teacher;
2. Informs the learner immediately about the consequences of his actions;
3. Is self-pacing, with events occurring at a rate determined by the learner;
4. Permits the learner to make full use of his capacity for discovering relations of various kinds;
5. Is structured in such a way that the learner is likely to make a series of interconnected discoveries about the physical, cultural, and social world.

The activities within the environment are autotelic; that is, the activities are self-rewarding and do not depend upon rewards or punishments that are unrelated to the activity. For a self-rewarding activity to be autotelic, it must help the learner develop a skill, learn a concept, or develop an attitude that is useful in some other activity. Autotelic activities are intentionally designed to reduce the rewards for success or the punishment for failure to tolerable limits for the learner and for society; thus, the learner can master some skill that is useful in life, but that often cannot be learned through direct experience since the cost of failure is too great to tolerate.

The Delivery System

In 1967, the Early Childhood Division of the Laboratory began developing an experimental in-service training program for teachers and teaching assistants.*

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* Throughout this report the terms teacher and teaching assistant are used separately when specific reference is made to the group and interchangeably when referring to their role in the teaching process. Teaching assistants (not aides) are usually parents from the community; they are perceived as, and trained to be, an integral part of the classroom teaching/learning process. Each HS or FT class includes one full-time paid teaching assistant.

The training program was designed to help them implement the Responsive Program in their classrooms. The following year, several people from each community were selected to be Program Advisors. The PAs received additional Laboratory training; each, in turn, trained from ten to fifteen teachers and the same number of assistants in the use of the program. The training model and delivery system that have been developed since then have the characteristics described below:

The Laboratory staff conducts a two-week workshop for PAs prior to the beginning of the school year. After the PAs return to their centers, each conducts a four-day workshop for teachers and assistants before class sessions open for children. During the school year, the PAs conduct periodic in-service workshop for teachers and assistants; each session is designed to introduce content, materials, and procedures to be used in the classrooms. The basic procedure encourages the PAs to introduce the new content or the new skill by conducting a discussion, or by illustrating the skill with another teacher showing the behavior model (videotape is one method employed), or by demonstrating the use of materials. The teachers and assistants then practice in their individual classrooms the following week, report back on the process, and either move on or repeat the operation.

The weekly workshop topics and related classroom activities for the Responsive pre-school program are outlined in "Training Unit Outline Guides." A notebook entitled In-service Teacher Training in the Use of the Responsive Program (Nimnicht, 1971) contains the outline guides and background articles describing the procedures and approaches of the Responsive Program. A Handbook for Teaching Assistants in the Use of Specific Responsive Toys (Nimnicht et al., 1971) and a Guide for Learning Booth Attendants (Barnes et al., 1970) have also been developed. Additional materials are contained in The New Nursery School (Nimnicht et al., 1969), a paperback and six accompanying booklets that include 64 learning episodes.

The program also uses 16 film clips in which teachers model the use of learning episodes; other classroom behaviors are demonstrated on videotapes.

In addition to conducting the workshops, the PAs spend at least three hours every three weeks in each teacher's classroom to observe, demonstrate, or join the teaching staff in working with the children.

The PAs return to the Laboratory for at least three additional weeks of training during the school year and receive some on-site training when the Laboratory's staff visits each center to observe and evaluate the effectiveness of the program.

Evaluation Concerns

The operational requirements of an educational program such as Head Start or Follow Through limit the choice of an evaluation design. Randomization was not possible in the assignment of students, teachers, classrooms, or schools participating in the program; furthermore, equivalent control of comparison groups was not possible. As a result, the evaluation could not be based on a before-after design characterized by random assignment of children to experimental and control groups. In most research on Head Start and Follow Through, control or comparison groups are usually similar groups in the same school district or in a neighboring district. Often comparison groups are "whatever is available."

Consequently, the Planned Variation program should be viewed as a developmental curriculum study and not as experimental in the strict sense. More accurately, it represents a quasi-experiment in several natural settings. Data collection procedures may follow planned schedules, but little control is possible over the specification and scheduling of experimental treatments. Treatment is cumulative and follows the Responsive Program objectives. The extent of the treatment is, we feel, correlated with the degree of implementation, and the degree of implementation is correlated

with outcome measures.

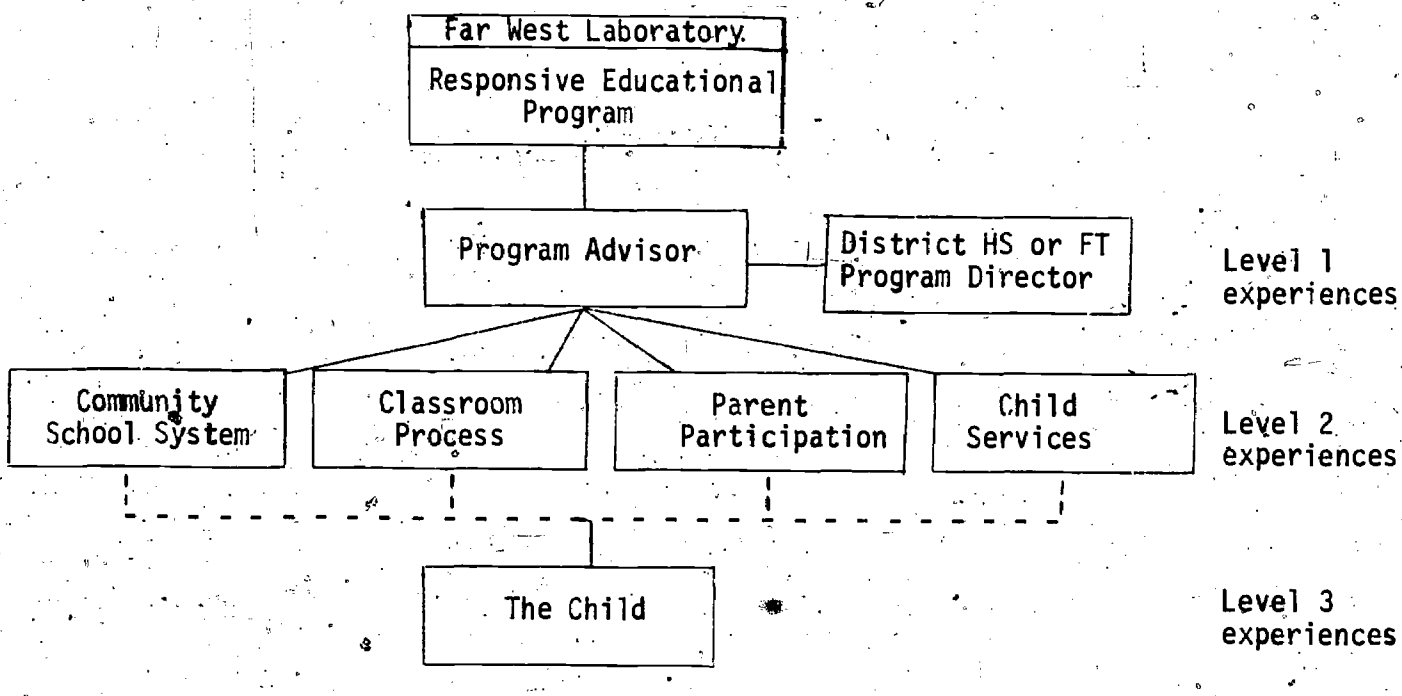
Perhaps the most critical consequence of the quasi-experimental character of the HS/FT Responsive Planned Variation Program from an evaluation standpoint is that each community program must be treated as essentially a separate quasi- or pseudo-experiment. For this reason, comparisons of results across different communities cannot be cast in terms of statistical tests based on randomization. Where comparisons are made across communities in this report, they are made on a logical rather than a mathematical basis.

In each of the communities that constitute the basic study sample, comparison groups were identified whenever possible and their collaboration obtained so that it was possible to contrast children on various characteristics. However, even in cases where comparison groups were identified and tested, such groups were often not similar to the experimental group as would have been ideally preferred. In most cases non-program groups represented higher socio-economic status. In view of these circumstances, comparisons made with non-program groups tend to be biased in favor of comparison groups. That is, such comparisons would be unfairly loaded against the hypothesis of (relatively) successful REP implementation.

Program Implementation Outcomes

The goal of research is to make reliable criterion statements. Traditionally, program objectives are translated into criterion statements; then data are collected and compared with that of non-treatment groups to test the significance of the differences. Too often, criterion statements on child outcome variables are examined before program implementation is determined. In the previous section, the delivery system for implementing the REP was described. The diagram below is presented to help clarify how the relationship between implementation and outcome is conceptualized in this report.

IMPLEMENTATION/DELIVERY SYSTEM



As indicated previously, the Laboratory trains Program Advisors who work at the local level to implement the various components of the Responsive educational process. PAs work with the school system to make it responsive to parents. PAs train teachers to create a classroom environment that responds to the child. PAs work with parent groups to set up participation and involvement programs. The PA sees to it that child health and nutritional services are delivered. Ultimately, these changes will affect the child's life chances. Outcome data for Level 3 are not ready for presentation at this time.

This report will concentrate on Level 1 and 2 experiences. We will focus on the PA, the educational institution, the classroom, and the parents to determine program effects. Child data that are reported will support program effects at Level 2.

Position on Evaluation of "Compensatory Education" Programs

To understand the methodology and nature of this evaluation report, it is

necessary to understand how the Responsive Program views "compensatory education." The overall scheme for this report reflects a different set of notions underlying "compensatory education." The background and rationale for our approach are discussed at length in a paper entitled "A New Direction for Compensatory Education Programs" (Nimnicht, et al., 1972), which is available and is considered a support document for this report. The following summary paraphrases from that report:

Basically, the general thesis is that schools and society are failing large numbers of children. One group includes children growing up in environments that do not provide the basic requirements in terms of food, shelter, health, and adult attention to insure there is no stunting of physical, psychological, or intellectual development. This group is environmentally deprived. Further, this type of deprivation is not limited to any social, economic, or ethnic group.

Another group of children fail because they differ from white middle-class children. This approach evolves from two central notions: a family's ability to attend (ATA) to a child and the community's or school system's ability to respond (ATR) to a child.

The Ability to Attend (ATA). The ability of a family to attend (ATA) to a child's physical needs are reflected in the expectant mother's care and the subsequent adequacy of food, shelter, and health care for the child. We believe that the lack of adult attention is one of the major factors in environmental deprivation. Consequently, variables in the environment that drain off adult time and energy affect a parent's ability to attend to a child. We contend that parents' ATA is reflected in a failure of social institutions. No expecting mother should be unattended, no family should be undernourished or have inadequate health care. If a mother is the only adult in the house and must work, she should either be able

to stay at home and attend to her child or receive adequate child care while she works. Further, a dirty, dangerous, crowded, noisy, and/or polluted environment that surrounds the home reduces the family's ATA and reflects a failure by social institutions, not by the parent or the child. Providing adults with time and ability to attend to the child is only one part of the problem.

The Ability to Respond (ATR). With reference to an educational program, the school's ability to respond (ATR) to the child is crucial for child development. In the present system, schools are designed to serve (a) white middle-class children who come from families with values in accord with the teacher's, or (b) other children who want to be like white middle-class children.

In our present educational system, the curriculum and procedures to teach that curriculum reflect a low ability to respond. Procedures are based on the "lock-step" notion of children at a given level, usually based on age, and the massing of a large group ready to learn the same lesson. Further, children are motivated by extrinsic factors (adult praise, grades, avoidance of failure, peer pressure) and not by an internal desire to know, to learn, to explore, or to figure.

The curriculum reflects the "melting pot" theory and essentially is designed to produce educated white citizens who adhere to the same set of values. The study of history in the schools strongly supports this contention. History textbooks concentrate on the role of Europeans who landed on the North American coast and not on the role of the Native Americans who preceeded the Europeans. Also, the historical contributions of the American Black or the Native American are relatively untouched; when discussed, they are misrepresented.

Consequently, the extent to which a child and his family differ from the "ideal" child the school is equipped to teach determines the extent to which the system is handicapped in terms of responding to that child. Both clusters of

variables (ATA and ATR) must be considered and incorporated into any evaluation of "compensatory education" programs. The pre-existence of various community conditions definitely influences the implementation of an educational model such as the Responsive Program.

In this report, a preliminary attempt is made to look at these constructs. Existing census data on each Planned Variation community were retrieved to study gross ATA variables such as population density, value of homes, housing that lacks plumbing, and mobility of population. Information on the number of siblings in the family, number of homes with fathers, whether or not the mother works, etc., was collected to estimate the family's ability to attend to children. One measure of the schools' ATR is the degree of congruence between values of children and teachers. To explore this area we compared the ethnicity of teachers with the ethnic composition of the children they teach. We realize that these are crude indicators, but they point to directions for future research and evaluation.

It is clear that various approaches to education, such as the Responsive Program, will be more successful where pre-existing conditions are conducive to implementation. Further, programs will also function best where ATR conditions are now, or can become most favorable. If a program's objective is to improve a school system's ability to respond, the success of the program should be evaluated along that dimension.

Form of Experience

One final notion is important. Changes in the form of educational experience constitute a meaningful and valid outcome. For example, if there is evidence that children in Responsive HS or FT classrooms ask more questions or are offered more educated choices, or are demeaned less, objectives related to these process variables

will be considered satisfied. It is not necessary to relate questioning behavior to changes in achievement test performance for validation of process changes. Classroom process changes, like other program variables that meet our requirements of value, logic, and sense of taste, are valid in their own right upon evidence of their occurrence.

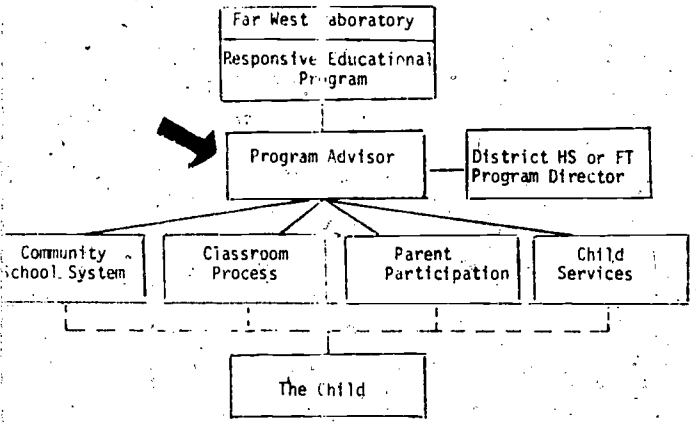
Organization of This Report

The remainder of this report focuses on evidence concerning the Laboratory's effectiveness in delivering training to local Program Advisors. The report also evaluates the ability of Program Advisors to train teachers to implement Responsive Program procedures. The report also examines the School System/Community and the Parent Component for indicators of successful implementation. Finally, child outcomes are discussed. There is one chapter devoted to each of these areas: Program Advisor, School System/Community, Classroom Process, Parent Participation, and the Child. At the beginning of each chapter, specific objectives related to the topic of that chapter are listed along with a chart indicating the available data relating to the objectives. Some of the objectives listed may not be discussed extensively in the context of the chapter because limited resources have limited evaluation efforts. Child services such as health, dental care, and nutrition are an integral part of the Responsive Planned Variation Program, but an evaluation of these components is beyond the scope of this report.

Ultimately, all the components of the PV program are designed to benefit the child. However, only a small portion of the program's effects on children are discussed in this report. These effects are primarily related to performance on standardized achievement tests. It is clear that these data are remote from reflecting the major goal of the REP Planned Variation program, which is to increase the life chances of children.

CHAPTER 2

THE PROGRAM ADVISOR



Objectives for the Program Advisor

1. To train teachers and teaching assistants to implement the Responsive Educational Program.
2. To act as a resource person and to provide feedback to teachers on the progress they are making in implementing the program.
3. To promote understanding of the Planned Variation REP in the school system and the community.
4. To facilitate the involvement of parents in the Planned Variation REP.
5. To act as a liaison between the Laboratory and the school system.
6. To assist the Laboratory in evaluation activities.

Data to be Presented

Sources	Community							
	B		C		D		E	
	HS	FT	HS	FT	HS	FT	HS	FT
PA Self-Report of "Use of Time"	X	X			X	X	X	
Teacher Responses to Questions About PA	X	X	X	X	X	X	X	X
Teacher Report of Forces That Influence Teaching	X	X	X	X	X	X	X	X

The Role of the Program Advisor

The underlying principle of the Laboratory's training program is that program competency should be developed at the local level and that the Laboratory, over time, should disengage itself from local program development. Also, the training program should have the potential of reaching large numbers of teachers and teaching assistants. To accomplish this goal, the training delivery system focuses on the Program Advisor (PA).

The Program Advisor is first a trainer of teachers, a teaching resource person with the following job description:

> The Program Advisor will be responsible for ten classrooms and for the training of ten teachers and ten teaching assistants in these classrooms. The Program Advisor will visit each classroom at least one-half day every two weeks to observe, demonstrate, or teach along with the teacher and teaching assistants. The Program Advisor will arrange to have the videotape recorder moved from classroom to classroom and to critique the videotapes made by the teachers and teaching assistants. The Program Advisor will assist the Laboratory in making observations of the teachers, in testing the children, and in collecting other information for evaluation.

Program Advisors also perform other duties related to implementation of the Responsive Educational Program. Besides assisting with the classroom process in such areas as planning, classroom control, and teacher/teaching assistant relationships, Program Advisors are responsible for increasing the amount of parent participation and involvement and for working with the school's administrative staff. Their job also includes attending meetings with other Head Start or Follow Through staff, administrators, and community groups, and helping the teachers with parent involvement.

Program Advisors are selected by the school system. They attend Laboratory-conducted workshops and use Laboratory-developed materials to carry out local training programs. Program Advisors usually begin their training of teaching before the opening of school by conducting four-day workshops for teachers, teaching assistants,

and concerned community people. These training sessions, which focus on giving participants an overview of the Responsive Program, may include in-depth demonstrations of classroom management techniques for those who are more familiar with the program. During the year, Program Advisors continue to conduct a series of in-service workshops for teachers and teaching assistants.

In order to evaluate the degree of success the Laboratory has in training PAs, the Laboratory collected information from the PAs and the teachers/teaching assistants relating to the PAs' role as trainers of teaching. First, Program Advisors themselves were asked to complete "Use of Time" forms at the end of each month to give an indication of their day-to-day duties and the time spent in various aspects of their job. Secondly, teachers and teaching assistants were given questionnaires which contained questions relating to Program Advisor effectiveness. Also, teachers were asked to complete an instrument indicating the relative impact of various forces, such as the PA, upon their teaching.

Program Advisor's "Use of Time"

The Program Advisor's "Use of Time" data are presented in Table 2.1. The data are somewhat sketchy, owing to the facts that Program Advisors were asked to complete the "Use of Time" forms only at selected times during the 1970-71 and 1971-72 school years, that no forms were received from Program Advisors in Community C, and that only Head Start Program Advisors in Community D returned forms. Nevertheless, by summarizing the available data across districts, we can obtain some indication of how Program Advisors spent their time.

In general, Program Advisors spent from one-fourth to one-third of their time working with classroom-related activities, including in-class demonstrations

TABLE 2.1

Percentage of Time Per Month Spent in Various Activities by Program Advisors

Percent of time spent in:	Community B			Community D			Community E	Total
	HS(N=1) Feb.Apr. 1971	HS(N=1) Feb.Apr. 1971	FT(N=2) Nov. 1971	HS(N=1) Feb.Apr. 1971	HS(N=1) Feb.Apr. 1971	FT(N=2) Feb. 1972	HS (N=1) Feb.Apr. 1971	
	%	%	%	%	%	%	%	%
I. Meet with local administrators, agency directors, visitors, attend local (non-Responsive Program) conference.	22.0	8.0	16.0	27.0	14.0	21.5	15.5	17
II. Develop, order and/or collect classroom materials.	4.5	8.0	12.0	7.0	3.0	6.0	7.0	9
III. Perform Laboratory and local administrative tasks, miscellaneous tasks.	30.0	31.5	8.5	11.0	15.0	23.5	5.5	18
IV. Attend Laboratory training and/or Laboratory-conducted on-site training workshop.	0.5	14.0	0.0	0.0	30.5	1.5	13.0	8
V. Attend parent meetings.	3.5	0.5	4.0	3.5	0.0	0.0	2.0	2
VI. Plan and conduct workshops.	6.0	8.5	12.0	11.0	7.0	7.0	10.5	9
VII. Prepare for classroom activity, demonstrate, observe, participate in classroom, make videotapes in classroom, give feedback to teacher.	24.5	21.5	38.0	39.0	30.5	33.5	37.5	31
VIII. Travel, locally between schools and to Laboratory PA training workshops.	9.0	8.0	9.5	1.5	0.0	7.0	9.0	6

and visits and out-of-class teacher-training workshops. Two other major blocks of time were spent in Area I, attending meetings and local conferences, and Area III, performing Laboratory and local administrative tasks.

It would, of course, be ideal if the Program Advisors could decrease the time they spend in administrative and public duties to allow more time to be spent in the classrooms. However, the real situations in the communities require the Program Advisors to perform many important administrative duties. One Head Start Program Advisor indicated that these administrative duties included writing portions of the Head Start proposal, developing and budgeting training sessions for substitute teachers and volunteers, operating as a resource person for school staffing, and interviewing and hiring teachers and teaching assistants.

Program Advisors indicated that they had not spent much time for "parent meetings." It should be pointed out that the PAs' role in parent involvement is to assist the HS or FT director or the PAC chairman who usually has the responsibility to get parents participating in the PV program. Thus the data should not be interpreted as PAs' failure to involve parents.

Questions Relating to Program Advisors on Teacher/Teaching-Assistant Questionnaire

Teachers and teaching assistants, who receive the training given by Program Advisors, answered questions relating to the teacher/Program Advisor relationship and reacted to the quality of training they received from the Program Advisors. The questions were part of a questionnaire given to teachers and teaching assistants during the 1970-71 school year. The questionnaire is described in Chapter IV.

Inservice Training

Teachers and teaching assistants were asked, "How frequently do you have inservice workshops for the Responsive Model?" The data are presented in Table 2.2.

Note that in-service workshops conducted by the Program Advisors are held monthly in Community B; that a workshop is held weekly in Community C; and that workshops are held bi-weekly in Communities D and E.

TABLE 2.2

Frequency of Responsive Program In-service Workshops. Question: How frequently do you have in-service workshops for the Responsive Model?

	B (n=45)	C (n=44)	D (n=29)	E (n=29)	Total (N=157)
Weekly	2%	88%	-	31%	31%
Bi-Weekly	7%	7%	94%	66%	34%
Tri-Weekly	24%	5%	3%	3%	11%
Monthly	67%	-	3%	-	24%

Teachers and teaching assistants were also asked, "Do you find in-service workshops responsive to your needs?" Response data are presented in Table 2.3. The responses indicate that most teachers and teaching assistants did find the workshops responsive to their needs. However, it should be noted that one-third of the respondents in Communities D and E disagreed with the question, which has implications for program development in this area.

TABLE 2.3

Teacher and Teaching Assistant Satisfaction with In-service Training. Question: Do you find the in-service workshops responsive to your needs?

	B (n=53)	C (n=36)	D (n=27)	E (n=28)	Total (N=144)
Yes	94%	81%	67%	68%	81%
No	6%	19%	33%	32%	19%

Data from Tables 2.2 and 2.4 and teacher turnover (see Chapter 2) suggest that it may be necessary to adjust the frequency of the workshops to the needs of the teachers. New teachers may benefit more from weekly workshops while experienced ones may prefer bi-weekly or monthly workshops. Teacher turnover data indicated that Community B had more experienced teachers (56%) for 1970-71 school year. Most workshops were held monthly there and 94% of the teachers expressed satisfaction with the workshops. Communities D and E had mostly new teachers (67% and 75% respectively), and this may be the reason the workshops were held more often in these communities. However, about one-third of the teachers in each community expressed dissatisfaction with the workshops. It is possible that it is more difficult to train new teachers.

Aside from evidencing general satisfaction or dissatisfaction with in-service workshops, the respondents made comments that ranged from a desire to visit other REP classrooms, through requests for teacher demonstration, to requests for information on handling discipline problems, child devemopment, and child psychology.

Relationship with Program Advisor

Teachers and teaching assistants were asked, "Do you have difficulty working with the Program Advisor?" Table 2.4 indicates that over 95% of them indicate no difficulty in working with the REP Program Advisor.

TABLE 2.4

Teacher and Teaching Assistant Relationship with Program Advisor. Question: Do you have difficulty working with the Program Advisor?

	B (n=54)	C (n=41)	D (n=28)	E (n=29)	Total (N=128)
Yes	2%	2%	4%	10%	5%
No	98%	98%	96%	90%	95%

Educational Forces Inventory

As a means of identifying the forces other than children's needs that influence teachers in the program, the Educational Forces Inventory (EFI) was administered to Follow Through teachers and teaching assistants in May of 1972. A copy of this inventory appears in Appendix D.

The EFI, devised by the Laboratory, consists of three related tasks. First, each teacher was asked to rank a list of thirteen forces from most important to least important according to how each one influences her own teaching. The thirteen forces were: Principal, Other Teachers, Parents, Curriculum, Testing Programs, Statewide Mandates, Physical Facilities, Social Environment, Curriculum Personnel, Director, Program Advisor, and Teaching Assistant/Teacher.

Next, each teacher was asked to distribute 100 points among the thirteen forces, in this way indicating their relative strength. Finally, each teacher was directed to indicate for each of the forces whether it was a positive, negative, or neutral influence on her teaching. Six response options were allowed: strong positive influence, more positive than negative influence, more negative than positive influence, strong negative influence, equally positive and negative influence, and no influence.

Essential data for the Educational Forces Inventory are given in Table 2.5. The data are presented as mean ranks for each of the suggested educational forces for each of the four REP Planned Variation communities. Community data are pooled for the four communities and the pooled data, in turn, are ranked. The rank ordering of the mean ranks is intended to present a spectrum of how this sample of teachers collectively perceive the effect of educational forces on their teaching.

Figure 2.1 provides a way of illustrating the relative distances between the mean ranks for the thirteen educational forces. When one looks across the thir-

TABLE 2.5

Mean Ranks of Educational Forces That Influence Teachers for Planned Variation Communities

Factors That Influence	MEAN RANKS BY COMMUNITY				Four Planned Variation Commun.	Seven Responsive Program Commun.	Planned Variation Rank Order*	Responsive Program Rank Order*
	B	C	D	E				
Principal in the school where you teach	3.7	4.7	4.5	7.5	4.8	4.8	3	2
Central office administrative personnel	9.9	11.9	11.3	10.9	11.2	9.8	13	12
Other teachers in your school	6.3	7.9	7.1	6.0	7.1	7.7	9	9
Parents of the children in your class	6.2	7.1	6.4	6.4	6.7	6.8	8	6
Curriculum prescribed by the district	5.6	5.2	6.5	5.1	5.5	4.9	5	3
Instructional programs used to measure educational gains	9.6	10.0	10.1	10.8	10.1	9.3	11	11
Statewide mandates on certification, curriculum, grading, etc.	10.6	10.4	11.1	11.7	10.8	10.9	12	13
The school's physical facilities	5.6	4.6	6.3	5.0	5.4	5.7	4	5
The social environment of the community	6.4	5.4	5.7	6.8	5.9	6.8	6	8
Corrective curriculum personnel who came to your room, e.g., reading specialist, etc.	8.3	9.7	7.9	6.7	8.5	7.8	10	10
Director of the Follow Through Program	8.6	4.6	6.4	7.8	6.3	6.8	7	7
Program Advisor who works most with you	4.1	4.6	3.5	3.2	4.0	5.5	1	4
The teaching assistant (in your classroom)	4.1	4.9	4.1	3.0	4.2	4.6	2	1
NUMBER	16	41	15	20	92	169		

*Spearman's rho = .94

Non-Follow Through Teachers in 3 Planned Variation Districts, N=44	Mean Rank	Follow Through Teachers in 3 Planned Variation Districts, N=76
Curriculum (2.06)	2.0	
	2.5	
	3.0	
Principal (3.27)	3.5	Program Advisor (3.72)
	4.0	Teaching Assistant (3.83)
	4.5	
Social Environment (5.00)	5.0	Principal (4.84)
Physical Facilities (5.18)		
Testing Programs (5.41)	5.5	Physical Facilities (5.55)
Other Teachers (5.47)		Curriculum (5.63)
Parents (5.50)	6.0	
	6.5	Other Teachers (6.36)
		Social Environment (6.37)
Curriculum Personnel (6.77)	7.0	Parents (6.57)
	7.5	
Statewide Mandates (7.63)		
Central Office Administrators (7.70)	8.0	Curriculum Personnel (7.83)
		Follow Through Director (7.95)
	8.5	
	9.0	
	9.5	
	10.0	Testing Programs (10.01)
	10.5	Central Office Administrators (10.41)
	11.0	Statewide Mandates (11.00)
	11.5	

Kendall's tau for ten comparable "forces" for the two groups of teachers equals point sixty-four (.64) with $p < .004$.

Figure 2.1. Comparison of Mean Ranks of Follow Through and Non-Follow Through Teachers in Three Planned Variation Communities.

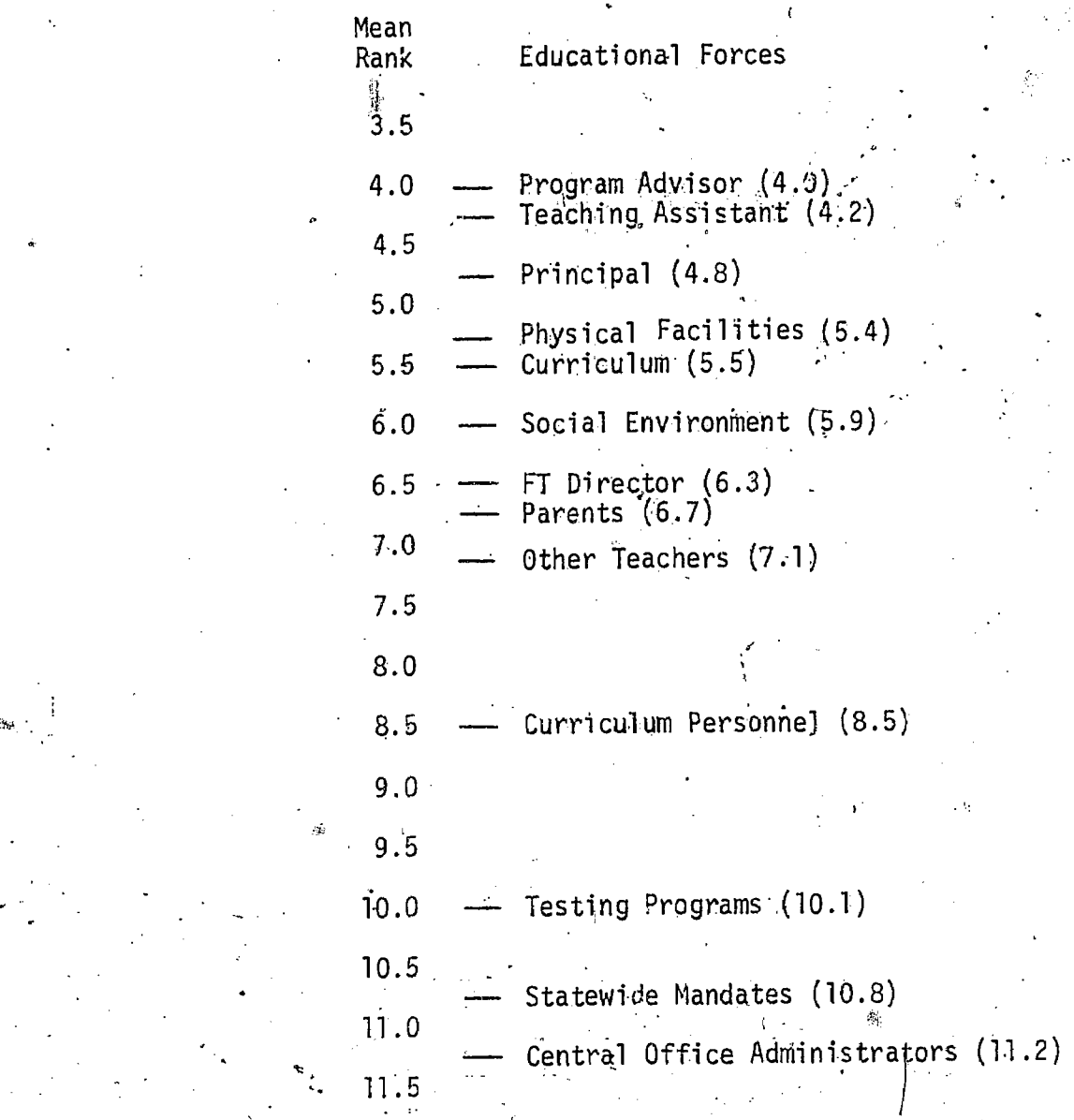


Figure 2.2. Mean Ranks of Educational Forces as Perceived by Follow Through Teachers in Four Planned Variation Communities, N=92.

teen forces, it seems clear that teachers rank higher those forces which are geographically nearest to them. Those forces manifestly remote from the classroom rank lower. The Program Advisor, who is perhaps the key person in the implementation of the Responsive Program, ranks first as an educational force on the teacher. The teaching assistant is ranked a close second to the Program Advisor. In Figure 2.1 "breaks" occur in the distance scale just before and just after "Curriculum personnel who come to your room." These breaks contribute to our thesis that the perceived importance of educational forces is related inversely to their distance from the classroom. Curriculum personnel who visit the classroom are not tied to the classroom; they represent district policy and, as seen in these rankings, are apparently separated perceptually from the school as a force. "Testing Program," "Statewide Mandates," and "Central Office Administrators," each distinctly separate from the school, complete the thesis of importance of educational forces and distance from the classroom.

Since the Educational Forces Inventory is an experimental instrument, there are no norms. In lieu of norms, we have presented in Table 2.5 the mean rankings of teachers in seven non-Planned Variation Responsive Program communities for comparison purposes. We have indicated the rank order of the mean rankings for the two groups of communities. It can be seen that the results for the two groups are similar.

Additionally, in three of the Planned Variation districts (Communities C, D, and E) comparable EFI data were obtained from non-Follow Through teachers. These teachers were also asked to rank various educational forces; only the forces "Program Director," "Teaching Assistant," and "Follow Through Director" were not included on their list. The mean rank data presented in Figure 2.2 reveal an interesting finding. When the rankings of the 10 forces that the non-Follow Through

group ranked were compared to the rankings by the Follow Through group of the same 10 forces, it was found that the rankings were similar. However, as indicated previously, Follow Through teachers ranked the Program Advisor and teaching assistant as having the greatest influence on their teaching. Thus, in terms of the factors which influence their teaching, Follow Through teachers are similar to non-Follow Through teachers, except for the important difference that Follow Through teachers are strongly influenced by the Program Advisor and the teaching assistant. The strength and directions of the various educational forces that influence teachers are reported in the teacher section (Chapter 4). Suffice it here to say that the Program Advisor is clearly a positively received addition to the school system.

Summary

The Program Advisor is a key element in determing the extent of implementation and ultimately the success of the REP Planned Variation program in each community. The PA facilitates the implementation of the REP by training teachers and teaching assistants. In addition, the PA must work to promote an understanding of the program on the part of the school personnel and people in the community. The degree of success on the part of the PAs in fulfilling their responsibilities also reflects the effectiveness of the Laboratory's training program.

The data presented in this chapter indicate the following concerning the role the PAs are fulfilling:

(1) Program Advisors spent about one-third of their time working with teachers/teaching assistants in the classroom to help implement the REP. In addition, they spent about one-tenth of their working time in planning and conducting inservice workshops for the teachers. Ideally the PA would be able to devote more time in the classroom, but constraints posed by other job responsibilities limit the time she can spend in the classroom.

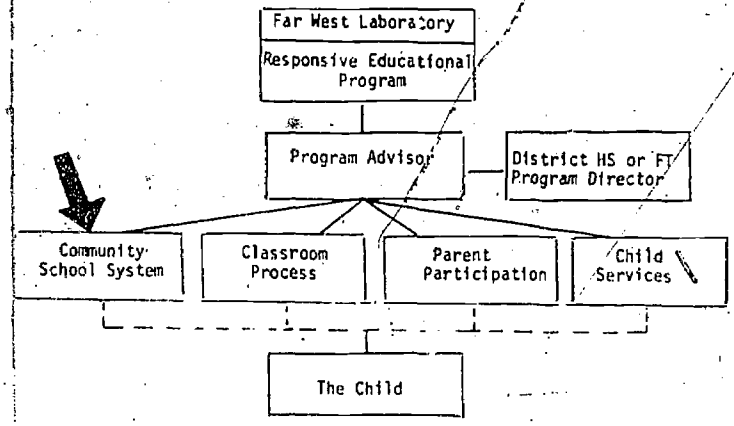
(2) The time the PAs spent with teachers in the classroom and the workshops the PAs offered evidently had an influence on the teachers. When asked to rank order 11 educational forces that range from physical facilities to central office administrators in terms of their impact on their teaching, the teachers indicated that the PAs had the most impact on their teaching.

(3) Dissatisfaction with the workshops was expressed by 6% of the teachers in Community B and 19% in Community C; but the corresponding percentages were 33% in Community D and 32% in Community E. It may be that the differential turnover rates are involved here, since Community D and Community E had lower teacher turnover than the other two communities (see teacher turnover data presented in Chapter 2). Thus, REP teachers returning for their second year may have had higher expectations for their training for implementing the more complex program procedures (e.g., facilitating discovery learning).

(4) A vast majority of the teachers from all communities reported having satisfactory working relationships with their PAs.

CHAPTER 3

THE COMMUNITY AND THE SCHOOL SYSTEM



Objectives for the Community and the School System

1. To support the goals and objectives of the Responsive Educational Program leading to eventual institutionalization of the program.
2. For the school system to become responsive to the needs of children from varied ethnic and social backgrounds.
3. For the school system to accept its role as an educational change agent responsible to the needs of the community.
4. To increase communication and cooperation between the community and the school system.

Data to be Presented

Sources

Community

	B		C		D		E	
	HS	FT	HS	FT	HS	FT	HS	FT
Community Characteristics	X	X	X	X	X	X	X	X
Child and Family Data	X	X	X	X	X	X	X	X
Teacher/Teaching Assistant/ Child Ethnicity Data		X		X		X		X
Teacher Turnover Data		X		X		X		X
Institutionalization Data		X		X		X		X
Implementation Ratings	X		X		X		X	

Community Characteristics

To evaluate program implementation as it relates to the community and/or school system, it is important to examine and understand the community* in which the program is being implemented. Consequently, general population characteristics and various economic indicators of the four communities will be discussed, and implications for implementation revealed by the various indices will be considered.

Population Characteristics

Table 3.1 summarizes various population characteristics of the four Planned Variation communities. All the communities can be classified as major urbanized areas. Their central city populations in 1970 ranged from 133,000 (for Community B) to 463,000 (for Community C). Population density was also greatest in Community C (11,178 people per square mile), being almost double the national average for cities having 200,000 or more inhabitants. The population densities of Communities B, D, and E were less than the national average with Community B having the lowest figure of 1,280 people per square mile.

The ethnic composition of the populations in these four communities is also indicated in Table 3.1. When we examine these figures, several facts become apparent. In 1970, all four communities had a larger white population and a smaller concentration of other ethnic groups than the national average. For instance, in the U.S., whites constitute 77% of the population, whereas other ethnic groups comprise 23%.. In Communities B, D, and E, whites make up more than 90% of the population, with other ethnic groups constituting less than 10% of the population. Only

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* District, Community, and Site are terms used interchangeably and refer to the four communities involved in the implementation process. To keep the communities anonymous, they are designated by the letters B, C, D, and E.

TABLE 3.1

Pre-Program Community Characteristics Affecting Implementation, Ability To Respond

National Bureau of Census Information	COMMUNITIES				
POPULATION CHARACTERISTICS	B	C	D	E	National Average
Population in central cities (1,000)	133	463	176	155	
Total metropolitan population (1,000)	265	1,349	558	411	
Population density per square mile	1,280	11,178	3,158	3,275	5,976*
Ethnic composition: 1970					
White	98%	79%	97%	91%	77%
Black	1%	20%	1%	7%	21%
Other	1%	1%	2%	2%	2%
Population change 1960-70: (in %)					
White	-6.1	-20.7	-8.2	.1	-1.2
Black and Other	68.3	34.1	42.0	81.4	36.0
Median age	29.8	31.4	28.4	29.4	29.3
Percentage of population under five	7.5	8.0	8.8	8.3	7.6
ECONOMIC INDICATORS					
Year-round units in central cities:					
Lacking some or all plumbing	7.0%	2.9%	2.7%	2.3%	3.7%
With more than one person per room	5.0%	4.7%	6.3%	4.7%	8.5%
Median value, single family home	$13,600	$12,900	$16,100	$15,000	$16,500
Median monthly rent	$71	$71	$80	$85	$91
Percent of total work force unemployed	*	5.4	*	8.7	4.9
Local government direct expenditure on education	$44.3%	$47.0%	$65.5%	$58.7%	45.0*

* Comparable communities

Community C comes close to the national average with 79% white and 21% other ethnic groups. Thus, of the four communities, Community C has the largest percentage of non-whites, the largest number of whom are Black. Communities B, D, and E have relatively small percentages of non-whites, 1.5%, 3.2%, and 9.2% respectively.

Population changes presented in Table 3.1 show that during the decade 1960-70, the population of the United States increased 5.2%. This increase was mainly accounted for by Black and other non-white ethnic groups, since the percentage of whites in the overall population diminished during this period. As a group, the four REP Planned Variation communities had population changes similiar to but not identical with those in the total U.S. In all communities, there was a growth of non-white ethnic groups. The largest increase was in Community E, where the non-white population increased by 81%. All communities execpt E showed a decline in the white population during the ten-year period 1961-70, with Community C showing the most marked decline. These population changes no doubt reflect in part the migration of the white population to the suburbs.

The median ages in Communities B, D, and E (29.8, 28.4, and 29.3 respectively) closely approximate the national average of 29.3. However, in Community C, the median age was slightly older (31.4). In Community B, the percent population under five years of age is 7.5%, close to the national average of 7.6%. Communities C, D, and E, however, contain somewhat greater percentages of children under five, --8.0%, 8.8%, and 8.3% respectively.

Economic Indicators

The data used in this section to describe economic conditions in the communi-

ties are inadequate. However, the figures are used because they are readily available and emphasize the direction evaluation should take in trying to understand more about pre-existing community characteristics.

Several housing indicators available from the 1970 census give some insight into the four Planned Variation communities. These include percentage of year-round housing units in the central cities that lack complete plumbing facilities, the percentage of occupied housing units with more than one person per room, median monthly rents, and home values.

Table 3.1 demonstrates that throughout the nation, 3.7% of the year-round housing units lack plumbing. In comparison, Community B had a greater percentage (7.0%) of homes without plumbing. The remaining three Responsive communities were similar to one another on this index, and all fell below the national average (2.9%, 2.3%, and 2.7% for Communities C, D, and E respectively).

Table 3.1 also shows that nationwide in 1970 8.5% of the occupied housing units in central cities were crowded (more than one person per room). Compared to the national figure, there was less crowding in the Planned Variation communities than in most central cities. Among the four, Community D had the greatest percentage (6.3%), followed by Community B (5.0%) and Communities D and E (4.7% each).

As further indicated in Table 3.1, the median monthly rent throughout the country in 1970 was $91.00. All four Planned Variation communities had lower rents than the national average. In Communities B and C rents were about $20.00 a month lower.

Cost of housing information is also shown. Homes in all four communities were valued below the national average, with Community C having the lowest median value ($3,600 below the national average).

Unemployment rates* were also available. Figures on unemployment for two of the communities were not reported in the U.S. census. However, the two statistics available were both above the national figure. The higest unemployment rate was in Community E, where 8.7% of the total work force (almost twice as high as the national average of 4.9%) were unemployed in 1970. The other community, C, had an unemployment rate of 5.4% of the total work force.

The same table also gives the percentage of government monies which were expended on education in the four communities, as well as the average expenditure for U.S. cities having 200,000 or more people. Outlays in Communities C and B approximated this average, and in Communities D and E (65.5% and 58.7% respectively) they were higher than the nation-wide figure.

Child and Family Data

To collect more information on the children and their families, the Laboratory asked HS PV teachers or teaching assistants to complete "child demographic forms" for all children in their classrooms. The FT teachers or teaching assistants completed "demographic forms" for only the entering kindergarteners or first graders. The two years' demographic data provide a fairly accurate estimation of several child and family background variables: ethnicity, family size, income level, mother working outside of home, father not present at home. Some of these family background variables reflect, to a gross degree, a family's Ability To Attend (ATA) to a child.

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* For a discussion of underemployment and subemployment, see "Crisis of the Underemployed" by W. Spring, B. Harrison, and T. Vietorisz, The New York Times Magazine, November 5, 1972, pp. 42-60.

TABLE 3.2

Family Ability to Attend (ATA) Indicators That Affect Implementation

ATA Indicators	Communities B	C	D	E
Total Number of Children in Program (HS and FT)	626	729	456	459
Economic level: percent of families within OEO poverty guidelines	67%	96%	91%	82%
Father absent: percent of families with father absent	35%	50%	32%	50%
Working mother: percent of families where mother holds an outside job	29%	31%	29%	23%
Size of family: estimated average number of children in the family	3.7	3.4	3.6	4.2

Family Ability to Attend. Nimnicht, et al. (1972) have discussed the notion of ATA as the ability of the parents or family to attend to a child's physical and psychological needs by providing adequate food, shelter, health care, and attention for the child. Certain family conditions, such as economic level, presence of parents, family size, etc., affect the family's Ability To Attend to a child. An economically poor family is less likely to be able to provide for adequate physical needs. A child in a family without the presence of a father and with the mother working outside the home is less likely to receive adequate attention from adults. Parents with many children may have to divide their energy among more children and, therefore, are likely to have less time for an individual child.

Community C appeared to have the lowest rating on the Family ATA indicators (see Table 3.2). Community C has more families that are economically poor, that have mothers holding jobs outside the home, and that do not have fathers at home. Community B has families that rated a little higher on ATA indicators. Compared to the other communities, it has fewer poor families, fewer working mothers, and fewer families without the presence of father.

Child Ethnicity. Figures depicting the ethnicity of children in the REP Planned Variation classrooms are presented in Table 3.3. Overall, the children in the program were composed of 40.6% Black, 45.0% white, 8.5% Mexican-American, and 4.0% Native American. But as the table shows, ethnicity varies greatly from district to district. The majority of the children in Community B were from white families and in Community C nearly all the children were from Black families. In Community D, 47% of the children were white, 38% were Mexican-American, and 10% were Black. The program in Community E consisted of 52% white children, 40% Black children, and a small percentage of Native American children. Small numbers of Native American children were also found in Community B (9%) and Community D (3%).

This information is particularly important in light of the notion of the

school's Ability To Respond to its children. When there are several different groups of children in the schools, as in Communities D and E, or when the schools are composed primarily of children who come from a different ethnic background than the teachers and administrators in the school, as in Community C, then the job of responding to the needs of all of the children in the schools becomes much more difficult. Furthermore, the fact that children in the program are from many different ethnic groups places additional demands for versatility and relevancy on the Laboratory training program.

TABLE 3.3

Ethnicity of Children (Head Start and Follow Through) in Planned Variation Communities (1971 Figures)

Percent in various ethnic groups	Across Districts (N=2270)	Communities B (N=626)	C (N=729)	D (N=456)	E (N=459)
Black	40.6	8.0	88.0	10.0	40.0
White	45.0	82.0	8.0	47.0	52.0
Mexican-American	8.5	0.8	0.7	38.0	1.0
Native American	4.0	9.0	0.7	3.0	5.0
Oriental	0.5	0.0	0.0	0.2	0.8
Other	0.9	0.0	2.0	1.0	0.8

The Children

In 1971, on the average, 93.5% of the Head Start children and 82.5% of the Follow Through children can be considered poor; i.e., their families met the Office of Economic Opportunity poverty guidelines. One of the major objectives of Planned Variation is to provide unique educational experiences to children from low-income families. These data indicate that the Planned Variation REP's were successful in directing their efforts toward children from low-income families. Furthermore, though we do not know the economic status of those PV children who did not meet OEO poverty guidelines, it seems safe to assume that a large proportion are marginal or close to the OEO poverty classification.

Overall, the children in the REP Planned Variation classrooms were composed of 40.6% Black, 45.0% White, 8.5% Mexican-American, and 4.0% Native American. But as shown in Table 3.3, ethnic composition varies from district to district. The majority of children in Community C are from Black families and the majority of children in Community B are from white families.

In addition, the community B program consisted of 9% Native American children and in Community D 38% of the children were Mexican-American. Other ethnic groups were represented, but only in small percentages (less than 3% for any one project).

Language. Because the ability of a school to respond to children is diminished if the school does not take into account that some of the children may hear and speak a different language in their homes than the language used in the school, an attempt was made to gain information on what language most often is used in the children's homes. Consequently, the question, "Which language is spoken most often in the home?" was included on the child information forms. The resulting data are presented in Tables 3.4 and 3.5.

As would be expected, given the large percentages of Black and white children in the program, English is the language reported to be spoken in most of the homes of the REP Planned Variation children. However, it should be pointed out concerning the Black children that there is a legitimate question as to whether the language spoken in their homes, i.e., Black English, is the same language as the middle-class English used in the school.

The data from Community D may also be somewhat misleading. Though 38% of the children in this community are Mexican-Americans, only 9% of the HS and 4% of the FT families were reported to speak Spanish "most often" in the home. Although it may be the case that only this percentage of families use Spanish "most often" in the home, it is probably safe to assume that Spanish is spoken to some extent in almost all of the homes of the Mexican-American children in Community D.

Thus, it is possible that almost all of the children in Community B, close to one-half of the children in Community E, and perhaps a third of the children in Community C may experience difficulties in school because they speak a language which is different (either Black English or Spanish) from that used in the school setting.

TABLE 3.4

Language Spoken in the Home of Responsive Planned Variation Head Start Children, in Percent, 1970-71

Community	Total No.	% English	% Spanish	% Other
B	131	100	0	0
C	204	92	8	0
D	120	90	9	1
E	119	98	2	0

TABLE 3.5

Percent of Language Spoken in the Homes of Responsive Planned Variation Follow Through Children, 1970-71

Community	Total No.	% English	% Spanish	% Other
B	525	100	0	0
C	495	98	1	1
D	336	95	4	1
E	340	99	1	0

Teacher, Teaching Assistant, and Child Ethnicity

One of the serious problems related to the school system's Ability to Respond to a child is that the child is often required to learn in an "alien" environment, one established and maintained by teachers and administrators who frequently come from a different socio-economic class and a different ethnic background from the children themselves. If a child is to be able to develop a positive self-concept, the system should adjust to his needs rather than meting out punishments for his

failure to perform well in a non-responsive school.

One effect of the PV program has been the involvement of individuals who share a common ethnic background with the children as teaching assistants and, ultimately, as teachers in the classroom. It is realized that this is not the final solution to the problem of assuring that classroom personnel are responsive to the children they serve. In some cases, for example, a person may tend to take on the values of the class to which he aspires. Thus simply because a teaching assistant or teacher is from the same ethnic group as the children in the class, it does not necessarily follow that he/she will be more responsive to the children than someone from a different group.

Figure 3.1* shows the contribution which the addition of teaching assistants drawn from the community has made toward achieving this goal. The most striking change is found in Communities C and D. In Community C, over 90% of the Follow Through children in 1970-71 were Black, whereas only 22% of the teachers were Black. However, 90% of the teaching assistants hired through the Follow Through program were Black, changing the overall percentage of Black teaching staff from about one-fourth to more than one-half. In Community D, the child population was relatively diverse with 9% of the children being Black, 44% white, 44% Mexican-American, and 3% Native American. The teachers, however, were all white, except for one who was Native American. As with Community C, the composition of the teaching assistants hired through the Follow Through program closely resembles the ethnic composition of the children, and this hiring policy contributed significantly to lessening the discrepancy between the teaching staff and the children in terms of ethnic and social-class background.

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* The teacher and teaching assistant figures were derived from the responses of teachers and teaching assistants who returned the 1970-71 Follow Through Teacher/Teaching Assistant Questionnaire. The child data represent a poll taken in 1970-71 of all kindergarten and entering first-grade children. These data do not reflect the increased number of parents who actively participate in classroom process. This factor increases the similarity between the ethnicity of adults in the classroom and the children they serve.

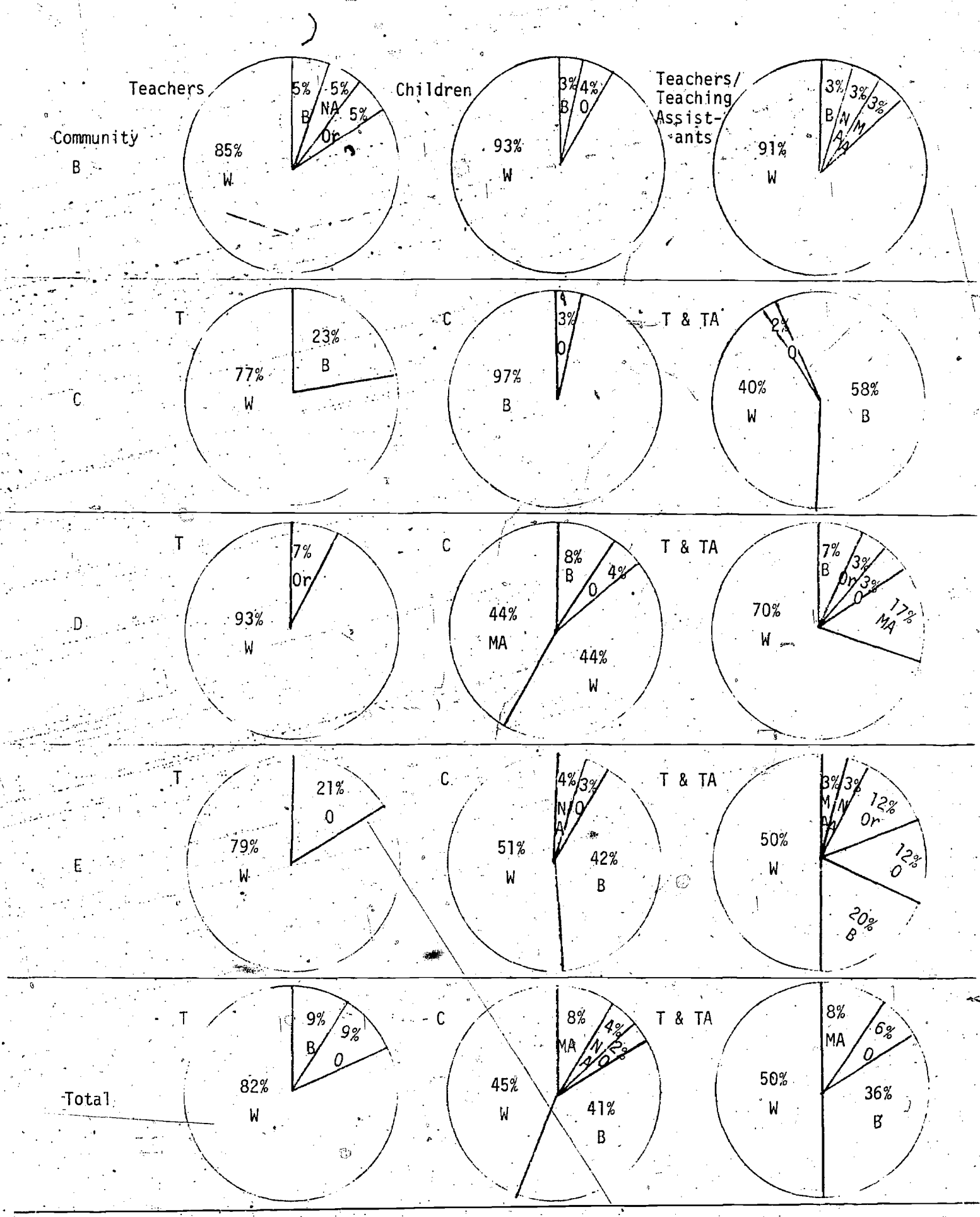


Fig. 3.1. School district characteristics affecting ability to respond : Follow Through staff ethnicity compared to child ethnicity (in percentages).
Note. - B=Black, W=White, NA=Native American, MA=Mexican American, Or=Oriental, O=Other.

A similar, but not so drastic, change occurred in Community E. The one community for which this analysis is not applicable is Community B, where there was no initial discrepancy between the ethnic composition of teachers and children as over 90% of the children were white and a majority of the teachers were white.

Teacher Turnover

Data on teacher turnover in the Follow Through Planned Variation programs are shown in Table 3.6. The four Follow Through programs experienced a loss of from 38% to 50% (average = 44%) of their teachers during the 1969-70 school year. New teachers, reflecting both replacement of those lost and increased program size, were added in 1970-71. These new teachers accounted for from 44% to 75% (average= 61%) of the REP Follow Through teaching staff in 1970-71. If we look at these changes another way, only 25% to 56% (average = 39%) of the PV Follow Through teachers had Responsive Program experience at the beginning of the 1970-71 school year.

All school systems experience turnover due to "normal" attrition of school transfers, maternity leave, retirement, husband's relocation, and the like. Teacher turnover in the Follow Through REP, however, is higher than normal due to certain programmatic reasons. For example, teacher turnover tends to be higher in inner-city schools. Also the additional time necessary for training in the principles of the program and implementing those principles in the classroom places an extra burden on teachers. Furthermore, a large proportion of teachers are "appointed" or "assigned" to the REP without knowing much about the program, and others must enter the program without serious consideration, commitment, or intent at the last minute if they want a job.

The high rate of teacher turnover in the four communities has grave implica-

tions for program implementation. Implementation of the program in the classroom is a process which takes considerable time and effort on the part of teachers and Program Advisors alike. When a teacher leaves the program, it means not only that more time and funds must be spent on training a new teacher, but that the implementation process itself is curtailed.

TABLE 3.6

Follow Through Teacher Turnover 1969-71

	COMMUNITY				
	B	C	D	E	Total
Number of Classes					
1969-70	16	16	10	10	52
1970-71	8	8	5	10	31
Total 1970-71	24	24	15	20	83
Number of Teachers					
1969-70	16	16	10	10	52
No. leaving '69-70	7	6	5	5	23
Percent loss	44%	38%	50%	50%	44%
New teachers in '70-71	7	13	10	15	45
Percent new teachers	44%	56%	67%	75%	61%
Percent experienced teachers in 1970-71	56%	44%	33%	25%	39%
Average Teaching Experience in REP for 1970-71					
Teachers	17	12	16	12	Months
Teaching Assistants	15	14	15	11	Months

Table 3.6 also shows the average number of months that teachers and teaching assistants in the four communities had taught in the Follow Through REP by the end of the 1970-71 school year. These data were collected from a sample of teachers and teaching assistants who returned questionnaires administered at the end of the 1970-71; thus they represent an estimate only. It can be seen that teachers and teaching assistants in districts B and D had the highest average experience. This no doubt reflects in part the fact that the REP was started in these communities in 1968-69, whereas the first year of the program in Community E was 1969-70. The reason that Community C shows a low average experience figure is not clear, since the program in this community was also started in 1968-69 and in this community teacher turnover was not so high as in the other districts.

One point should be stressed concerning teacher turnover as it relates to Program Advisor effectiveness. Obviously when teacher turnover is high, the job of the PA becomes much more difficult. Not only are her efforts frustrated when a teacher leaves the program, but her training must be flexible enough to accommodate both new teachers and teachers who have been with the program for two or three years.

Implementation - A Systematic Analysis of the Process

The REP represents a distinct and complex sub-subsystem. The goal of the Laboratory is to implement this sub-system into the larger educational system of the community. This process, of installing, maintaining and ultimately institutionalizing a sub-system into an existing larger system, has received extensive examination in the literature and by Laboratory personnel.

A position paper discussing theoretical concepts of institutionalization and applying these concepts to the REP program has been written (Thoms, 1971a). Further

an extensive study of the process of institutionalization began in 1969 and a report on initial data has been prepared (Thoms, 1971b). This second document uses data collected from thirteen districts including the four HS/FT Planned Variation districts.

The data on PV districts represent information collected on approximately 11 stakeholders in each district. To report these data for only the four Planned Variation districts would seriously dilute the major findings of this study. Consequently, the findings of this implementation study are presented for all (13) REP FT districts.

An analysis of the data collected during the 1969-70 school year indicates that positive changes in attitudes and knowledge toward the REP are taking place as the program develops in the school districts. Feelings about the Responsive Program generally improved over the period of the school year. This can be attributed to the acquisition of more information about the program as the form and substance of the program became more visible.

For example, the role of the Responsive Follow Through teacher was viewed as different from a regular teacher both in the classroom and in relation to parents. Educational advantages for children emanated from the program and disadvantages were seen mainly in the relationship of the program to the school system, not necessarily in the program itself. The function of the teacher and teaching assistant did not appear to improve during the 1969-70 school year. This fact was not based upon interpersonal relations, but rather on the difference between the teacher's and teaching assistant's perception of the teaching assistant's role; the lack of planning time for the teacher and the teaching assistant; and a general lack of knowledge of some stakeholders about the relationship.

The Responsive Follow Through Program did have an impact on the school where

it was located. However, this impact was both positive in terms of training, equipment, and process and negative in terms of non-Follow Through teachers' envy about the training and equipment. Problems also developed around consistency with ongoing procedures.

The parents of the Responsive Follow Through Program were viewed as being more supportive of the program at the end of the school year. The impact of the Parent Advisory Committee was also recognized as increasing by the end of the school year. A decline in the expressed satisfaction of the supplementary services is due to expectations of staff not being met, lack of supplementary personnel and lack of knowledge by supplementary personnel about their roles in the total program.

The data did indicate some areas of concern in the relationship of the Responsive Follow Through Program with the ongoing system. At least half of the stakeholders (Teachers, Teaching Assistants, Principals, Central Office Personnel, Program Advisors, Parents) interviewed did not know why the Responsive Follow Through Program was selected. A smaller percentage (25%) knew how the program was selected. Knowledge about the program, its objectives and procedures was also an areas of concern. Even though stakeholders expressed a more positive attitude about the program at the end of the school year, knowledge and understanding of the theoretical as well as operational aspects of the program were missing.

The problem of inconsistency of the Responsive Follow Through Program with the ongoing program resulted in misunderstandings and conflict. The ability of a system to accommodate a new subsystem or innovation is a key factor in the movement toward new goals. Finally, the perception of stakeholders about the lack of support from the central office staff has a direct affect on the security and autonomy of Responsive Follow Through staff members. This perceived lack of support also affects the relationship of the subsystem to the system and the system's efforts to accommodate

the subsystem or new program.

Implementation Ratings of Effects

In the spring of 1971, the Laboratory was asked by SRI to rate each of its Follow Through districts on 44 variables identified by SRI. Three staff members completed the ratings independently. Several areas were confusing to the raters and consequently ratings in these areas were discrepant. With discussion, agreement was reached and a combined group rating was generated. Next, the ratings were factor analyzed by the Laboratory to determine which of the 44 variables fell into logical clusters. Six clear factors emerged from the factor analysis and were given the following labels:

Factor 1: Degree to which the district holds similar educational orientation to REP.

Factor 2: Degree to which district's physical facilities and materials meet REP's requirements.

Factor 3: Degree of district administrators' support and involvement in Follow Through REP.

Factor 4: Degree of parental participation in the education of their children.

Factor 5: Degree of community parent involvement.

Factor 6: Quality of medical, nutritional, and other services for child.

It was then decided that these factors would provide a useful means for quickly evaluating the overall implementation level of a given district. Consequently, in March of 1972 a quarterly report on the Head Start Planned Variation communities was submitted to the Office of Child Development which included ratings on each of the six factors. The ratings were based on information and impressions gathered by Laboratory staff members who visited the communities. A summary of these ratings is presented in Table 3.7.

TABLE 3.7

Spring 1971 Ratings On Six Implementation Factors
For Head Start Planned Variation Communities

FACTORS	COMMUNITY			
	B	C	D	E
1. Orientation of the community to the REP.....	2	3	3	3
2. Adequacy of physical facilities.....	2	1	3	2
3. Degree of administrators' support.....	1	2	1	3
4. Degree of parent participation.....	2	1	2	2
5. Degree of parent-community involvement...	1	2	1	3
6. Quality of child services.....	2	1	3	2

1 = Low, 2 = Medium, 3 = High

When we consider the effect of implementation, some factors are more important than others. And some are more important than others at different times. For example, during the inception of the program, adequate physical facilities and child services are critical but a sponsor has little control over these areas. When these areas are satisfactory, administrative support is more important for program implementation.

There is another problem with these ratings. Some areas may contradict others. For example, as the program objective of involving parents in the educational process (factors 4 & 5) is achieved, administrative support for the program may drop due to alienation of administrators. This alienation may occur both because the involvement of parents means a sharing of authority and because initially there may be problems due to lack of experience on the part of parents.

Looking at each factor across districts gives a crude profile of the overall degree of program implementation. At the end of the 1972 year, the amount of administrative support (factor 3) and the degree of parent and community involvement in the educational decision-making process (factor 5) were rated low. Child services (factor 6) and physical facilities (factor 2) were judged adequate, and the educational orientation and agreement of the community with the responsive principles (factor 1) were judged to be high.

Probably the most important variable that affects program implementation is the degree of administrative support. In addition to staff ratings on administrative support (factor 3), teachers and teaching assistants also reported the nature of the administration's attitudes towards REP (Table 3.8) in response to a question on the 1970-71 Teacher/Teaching Assistant Questionnaire (see Chapter 4 for a description of the questionnaire).

Eleven percent of the total 143 polled indicated that administrative disagreements concerning the REP existed. The disagreements were lower in Community E. Laboratory staff ratings on administrative support were also the highest for Community E.

TABLE 3.8

Results of Teacher and Teaching Assistant Questionnaire Item:
"Are there disagreements between you and the principal/administrator in the school regarding the Responsive Model?"

	B	C	D	E	Total
Yes	11%	12%	14%	7%	11% (17)
No	89%	88%	86%	93%	89% (136)

Implementation -- Problems and Spread Effect

Other information on implementation was collected by the Lab staff. In the spring of 1972, a Laboratory staff member also collected additional program implementation information from each Planned Variation site. Two aspects of this information, those dealing with implementation problems and program "spin-off" or spread effects, are summarized below:

Site	Years working with Laboratory	Implementation Problems Dealing with	Indicators of Spread Effect
B	4 Years	a. District economizing procedures are limiting program effectiveness.	a. All district primary teachers received sponsor conducted training in REP. b. REP part of Model Cities. c. Widespread use of REP in kindergarteners across district.
C	3 Years	a. Administrative dislike of program and consequent lack of support	a. Model Cities adopted REP. b. Teacher Corps, through the local university, is training in the REP. c. Community-controlled school adopted the REP. d. District-wide elementary area supervisors were trained in REP processes.
D	3 Years	a. District's push for "accountability" is limited to reading test scores/short-term achievment.	a. REP materials being incorporated in Title I classrooms

Site	Years working with Laboratory	Implementation Problems Dealing with	Indicators of Spread Effect
			b. Visibility at State Dept. level as an effective early education program.
E	2 Years	a. A few teachers were unable to attend preschool workshops.	a. State Dept. financed a film and slide set of REP to disseminate throughout state.
		b. Pressure for teachers to move too fast to implement REP.	b. FWL staff invited to present program to city-wide and state-wide audience of educators.

Some statements can be made based on this set of information. The REP appears to have spread or proliferation effects. These range from informing other teachers and educators at the school district level to a broader-based information/dissemination effort conducted at the state level. The REP has also been incorporated into other educational programs such as Title I and Model Cities. Further, the problems associated with program implementation are diverse. Some problems arise from implementation itself and pressure to operationalize the REP. Others arise from district or state-wide mandates for economic streamlining or "accountability" demands (such as demonstrating higher test scores in reading and math). Still other implementation problems stem from disagreement with the two major REP goals--the creation of classrooms where children are responded to and are provided with a variety of activities to explore, and the active involvement of parents in the teaching/learning and educational decision-making process.

Summary

This section reports community and school system characteristics that were judged directly relevant to implementation of REP. Demographic and other socio-economic-evironmental data, and school conditions were dealt with from the standpoint of their specific effects on the mechanics of implementation, and also in relation to the two basic evaluation concepts, Ability To Attend (ATA) and Ability To Respond (ATR).

ATA indices at the community level included population density, population changes, unemployment rates, dwelling conditions, family size, and family structure. Comparisons were made across communities and to the national statistics. Implications of specific variables for level of ATA were discussed. A further delineation of how specific factors interact to affect a specific child was highlighted as the logical and necessary next step for a more in-depth project in the future.

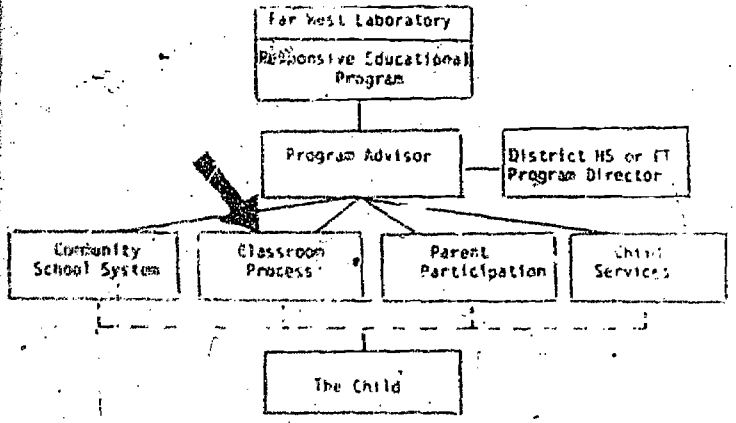
ATR characteristics of the school systems were analyzed for each of the four communities. Teacher turnover was pointed up as important in examining implementation effects. High teacher turnover rates decreased the extent to which classroom adults know and respond to the child. The extent of disparity in ethnic composition of adults and children in the classroom was discussed. One dramatic outcome of the REP program is the reduction in this disparity.

The implementation process complex was discussed as a system and a study of this process was described. Summary data were discussed for all Follow Through communities. Next, implementation ratings of various REP components were made and problems and program spread effects were listed.

The information included in this chapter is sketchy. It should be clear that areas were presented not because adequate data were available, but rather to demonstrate the breadth of the problems associated with documenting implementation.

CHAPTER 4

CLASSROOM PROCESS



Objectives for the Classroom:

1. Teachers and teaching assistants share instructional and learning responsibilities.

2. Teachers and teaching assistants create a responsive environment in the classroom:

   a. Room arrangement allows for freely exploring a variety of learning activities and for discovery learning.

   b. Learning experiences/activities are self-rewarding and self-pacing. Some learning experiences are spontaneous and others are pre-planned.

   c. Classroom limits are made clear to the children and positive redirection is the main technique used for handling inappropriate behavior.

   d. Children engage in a variety of learning activities individually, in small groups, or in large group; with or without an adult. Children freely express themselves and interact with one another.

3. Teachers and teaching assistants involve parents in classroom activities: parents work with children in learning activities; they provide input to teachers in classroom planning.

Data to be Presented

Sources	Community							
	B		C		D		E	
	HS	FT	HS	FT	HS	FT	HS	FT
Teachers' and teaching assistants' questionnaire.		X		X		X		X
Educational Forces Inventory		X		X		X		X
Purdue Teacher Opinionaire		X		X		X		X
Classroom ratings made by Program Advisors	X		X		X		X	
SRI observation data	X	X						
Learning Booth Achievement		X		X		X		X

Teachers'/Teaching Assistants' Self-Report

The Laboratory designed a teacher/teaching assistant questionnaire which was given to all Follow Through teachers and teaching assistants in the four Planned Variation districts in Spring of 1971. The questionnaire had been pre-tested several months earlier with a small sample of teachers in selected schools.

Table 4.1 contains the basic data on sample size and return rates by district. Response rates were very high (about 90%) and, although the returned sample sizes for district D and E are only of the order of 15 or 16, we feel that valid inferences can be made for two reasons. First, the responses to individual items mostly cluster around one response option. Second, the responses of teachers and of teaching assistants in a given district form the same pattern.

This fact is convincing evidence for success in implementation of the objective that teachers and teaching assistants share classroom responsibilities. Given the formal training, salary, and prestige differences that one might expect between teachers and teaching assistants, it is interesting to note the degree of concordance in their group perspectives. Inspection of the Tables B.1 and B 2 presented in Appendix B convinces the authors that the data can be pooled for the two groups.

Return Rates of the Teacher/Teaching Assistant Questionnaire

District	People	Return Rate	
		Number	Percent
B	Teacher	21	100
	Teaching Assistant	26	100
C	Teacher	24	100
	Teaching Assistant	22	91
D	Teacher	15	93
	Teaching Assistant	16	80
E	Teacher	16	84
	Teaching Assistant	16	87

Working Conditions

The question, "How do you feel about working conditions in your classroom?" was asked in the questionnaire. Responses to specific categories of equipment, supplies, classroom space, class schedule, salary, and planning time were solicited and respondents were asked to indicate a choice among "Satisfied-Mixed Feelings-Dissatisfied." Space was provided for suggestions on how to improve working conditions in the classroom.

Data for each category are presented in Table B.1 in Appendix B. Two-thirds of both teachers and teaching assistants indicated they were "Satisfied" with classroom working conditions. About 20% indicated they had "Mixed Feelings" and some 12% indicated they were "Dissatisfied" with working conditions. On the basis of these responses, it is possible to say that there is a great deal of satisfaction with working conditions in the classroom. What is not clear is the degree to which REP and local conditions respectively contribute to the expressed satisfaction with working conditions. Since the classroom was specifically mentioned in the question (as contrasted to working conditions in general), we can assume that a large percentage of teachers and teaching assistants are satisfied with REP classroom conditions.

Further inspection of Table 4.2 reveals that teachers and teaching assistants in the four communities expressed similar levels of satisfaction, with Community D having a slightly higher percentage of "Satisfied" responses (73%) and Community B a somewhat lower percentage (63%). Data presented in Table 3.7 of Chapter 3 indicate that the FWL staff also perceived Community D having the most adequate physical facilities.

To summarize, teachers and teaching assistants are in general agreement regarding working conditions in the REP classroom with most (68%, N=164) indicating that they are satisfied with conditions over a wide range of specific topics.

Teachers show greater satisfaction than teaching assistants with their salary. These data indicate that in general the Follow Through teaching staff of the four Planned Variation communities felt that their working conditions do not present any major problems that would block creation of a responsive physical environment.

TABLE 4.2

Teacher and Teaching Assistant Satisfaction with Working Conditions*

Response	Community B	C	D	E	Total
Satisfied	63%	69%	73%	71%	68%
Mixed Feelings	21%	23%	15%	17%	20%
Dissatisfied	16%	8%	12%	12%	12%

*Itemized response summaries appear in Appendix B

Use of Responsive Educational Program Methods

Teachers and teaching assistants were asked to indicate the extent to which they use several REP methods in their classrooms. Nine methods or important REP processes were enumerated and respondents were given the response choices of "High-Medium-Low" to check. Summary data are presented in Table 4.3, and complete data are included in Appendix B, Table B.2. The nine methods include: self-pacing, free exploration, discovery learning, spontaneous activities, self-rewarding learning, learning centers, freedom of choice, language experience, math workshop.

In general, we can say that in the four Planned Variation districts about 50% of the REP classrooms have "High" implementation by teacher and teaching assistant self-report on the nine program areas considered as a whole. The range of reported "High" implementation within communities runs from about one-third to two-thirds of the respondents. About 40% of the respondents admit to "Medium" use of REP methods

with a district range of from one-fourth to one-half giving this response. Something less than 10% of the respondents admit to a "Low" usage of REP methods in the classroom.

Summarizing, we can say that something in excess of 90% (total N=164) of the respondents claim either a "Medium" or a "High" level of usage of REP materials, procedures, and processes.

TABLE 4.3

Teacher and Teaching Assistant Self-Report of Implementation Level*

	Community				
Level	B	C	D	E	Total
High	39%	48%	63%	62%	51%
Medium	50%	42%	32%	34%	41%
Low	11%	10%	5%	4%	8%

*Itemized response summaries appear in Appendix B.

Mutual Acceptance of Teachers and Teaching Assistants

Teachers and teaching assistants were asked the question, "How well do you and your teacher/teaching assistant work together in the classroom?" Data given in Table 4.4 indicate that there is a great amount of rapport between teachers and teaching assistants, with something in excess of 95% of both groups indicating either "Extremely Well" or "Well" as their response.

TABLE 4.4

Teacher and Teaching Assistant Mutual Acceptance in the Responsive Program. Question: "How well do you and your teacher/teacher assistant work together in the classroom?"

	B	C	D	E	Total
Extremely well	39 (72%)	28 (82%)	26 (93%)	25 (81%)	118 (80%)
Well	13 (24%)	5 (15%)	2 (7%)	6 (19%)	26 (18%)
Not well	2 (4%)	1 (3%)	0	0	3 (2%)

Work with Parents

Teachers and teaching assistants in the Planned Variation districts were asked two questions about their working relationship with parents. Data for the first question, "Do you have volunteer parents working with children in your classroom?", are given in Table 4.5.

Teachers and teaching assistants responded similarly when the data for the four cities are combined. About two-thirds of the pooled classrooms have parent volunteers working with children. Since parent involvement is an important aspect of the REP, this outcome speaks well for implementation. When the districts are considered individually, it is clear that the use of parent volunteers in Community C is not so highly implemented as in Communities B, D, and E.

TABLE 4.5

Teacher-Parent Cooperation in the Responsive Program. Question: "Do you have volunteer parents working with children in your classroom?"

	Community				
	B	C	D	E	Total
Yes	41 (77%)	12 (33%)	25 (89%)	22 (76%)	100 (68%)
No	12 (23%)	24 (67%)	3 (11%)	7 (24%)	46 (32%)

Data for the second question, "Do you explain the Responsive Model Program to the parents of your pupils?" are given in Table 4.6. With 86% of the teachers and teaching assistants responding affirmatively, we can say that this aspect of the REP has been implemented to a high degree.

TABLE 4.6

Teacher and Teacher Assistant Cooperation with Parents in the Responsive Program. Question: "Do you explain the Responsive Model to the parents of your pupils?"

	Community				
	B	C	D	E	Total
Yes	42 (86%)	35 (90%)	19 (73%)	27 (93%)	123 (86%)
No	7 (14%)	4 (10%)	7 (27%)	2 (7%)	20 (14%)

A considerable measure of construct validity may be claimed for this measure. The very fact of a person responding affirmatively to this question indicates either 1) the explanations have in fact taken place, or 2) the respondent would like them to have. Either way, there is congruence with REP goals on the part of the respondent--itself an implementation goal, already.

Force Field Analysis

As a teacher works to implement responsive educational procedures, she is influenced by various situations, conditions, and people. These influences can have positive and negative effects on the extent of the implementation of the program and on the quality of educational experiences a child receives. For example, the nature of the physical facilities in a school influences the effectiveness of the teacher and directly relates to the learning experiences a child has. If there is inadequate space or materials, a child's educational experiences are affected. Similarily the positive or negative pressures and influences exerted by the school's principal or the Program Advisor also affect the teacher and ultimately the child. Teachers working with Program Advisors or principals who are supportive of and sensitive to teacher needs will feel better about their roles.

To assess the strength and direction of forces that influence REP teachers, a special instrument was developed. This instrument, presented first in Chapter 2, contained 13 pre-identified areas of potential influence. The teacher's task was to indicate the strength of each force by distributing 100 points across the forces and to rate the positive or negative direction of the force by assigning each force a weight from 1 to 5.

Average numbers of points assigned and average ratings were calculated separately for each force for each district. The two distributions of mean scores were then converted to z scores and plotted on the force field axes. The Forces Instrument was administered to all FT teachers. Data presented in the following section cover teachers only. The 13 forces included on the Forces Instrument

are listed below:

#	FORCE
1.	Principal
2.	Central Office Administrative Personnel
3.	Other Teachers
4.	Parents
5.	The Curriculum
6.	Testing Programs
7.	Statewide Mandates
8.	Physical Facilities
9.	Social Environment
10.	Curriculum Personnel
11.	Program Director
12.	Program Advisor
13.	Teaching Assistant

Figures 4.1, 4.2, 4.3, and 4.4 show the results of the force field analysis calculated separately for each district. Figure 4.5 shows force data aggregated for all four PV Communities.

The upper right-hand quadrant of the force field shows forces that are perceived by teachers to be both positive and influential. It is clear from the separate district plots and from the aggregated plot across districts that the teaching assistants (Force #13) and the Program Advisors (Force #12) represent strong positive influences.

These data demonstrate that the Laboratory's delivery system (working through the Program Advisor) does have a positive influence on the classroom teacher. The principals, but to a lesser extent than the PAs, or the teaching assistants, also appear in this "high-positive" quadrant. This position of principals on the force field is consistent across districts except for E. In Community E, using district norms, principals are perceived by teachers as a positive but somewhat less influential group.

Forces that appear in the upper left-hand quadrant of the force field are of particular program concern. These forces are above average in influence, but negative or inhibiting as seen by the teachers. These forces act negatively on program development and institutionalization.

#	FORCE
1.	Principal
2.	Cen. Off. Ad. Persnl.
3.	Other Teachers
4.	Parents
5.	The Curriculum
6.	Testing Programs
7.	Statewide Mandates
8.	Phys. Facilities
9.	Soc. Environment
10.	Curr. Personnel
11.	Program Director
12.	Program Advisor
13.	Teaching Ass't

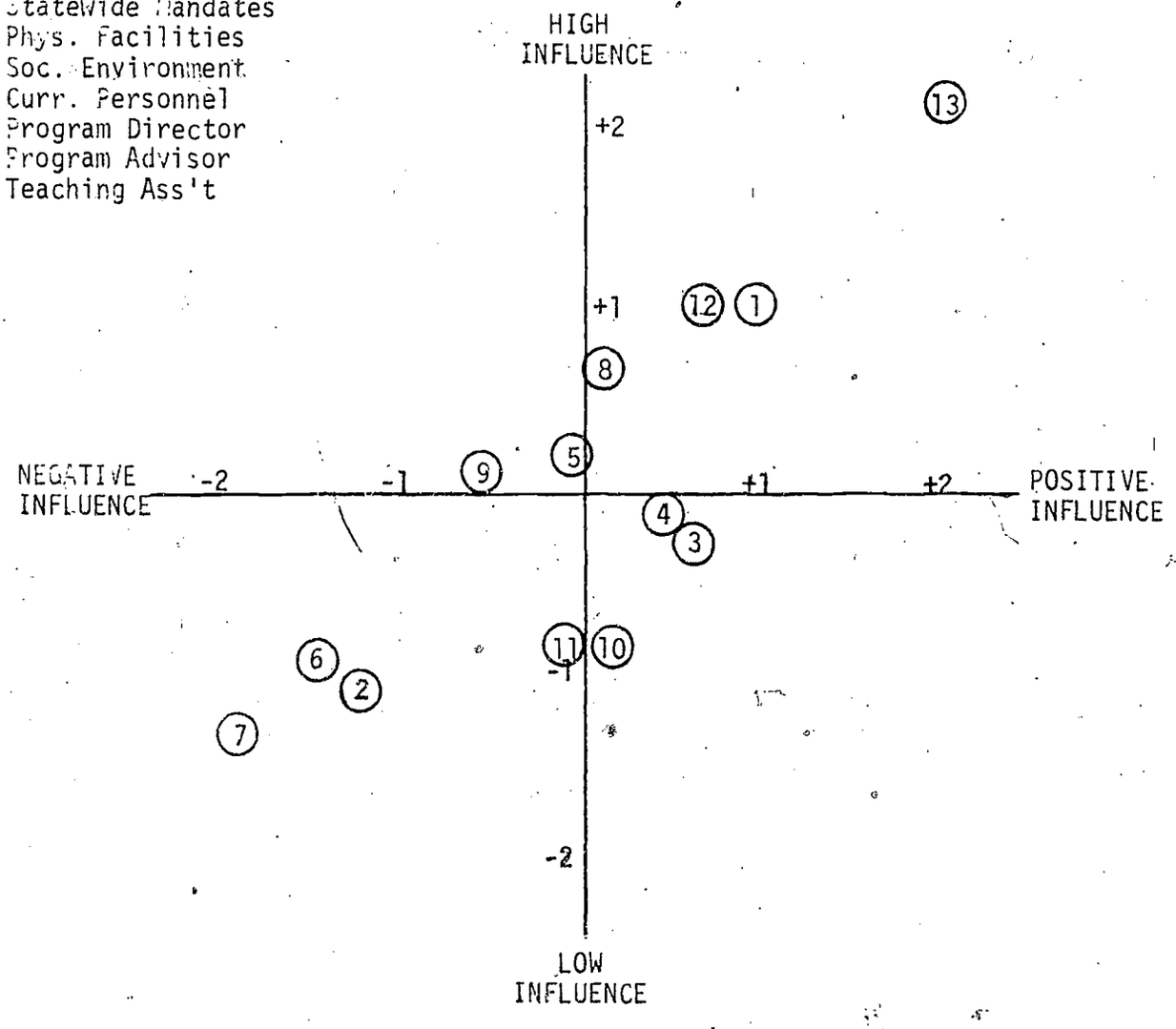


Figure 4.1. Plots of z scores for forces that influence teachers in Community B (N=41) using local norms.

#	FORCE
1.	Principal
2.	Cen. Off. Ad. Persnl.
3.	Other Teachers
4.	Parents
5.	The Curriculum
6.	Testing Programs
7.	Statewide Mandates
8.	Phys. Facilities
9.	Soc. Environment
10.	Curr. Personnel
11.	Program Director
12.	Program Advisor
13.	Teaching Ass't

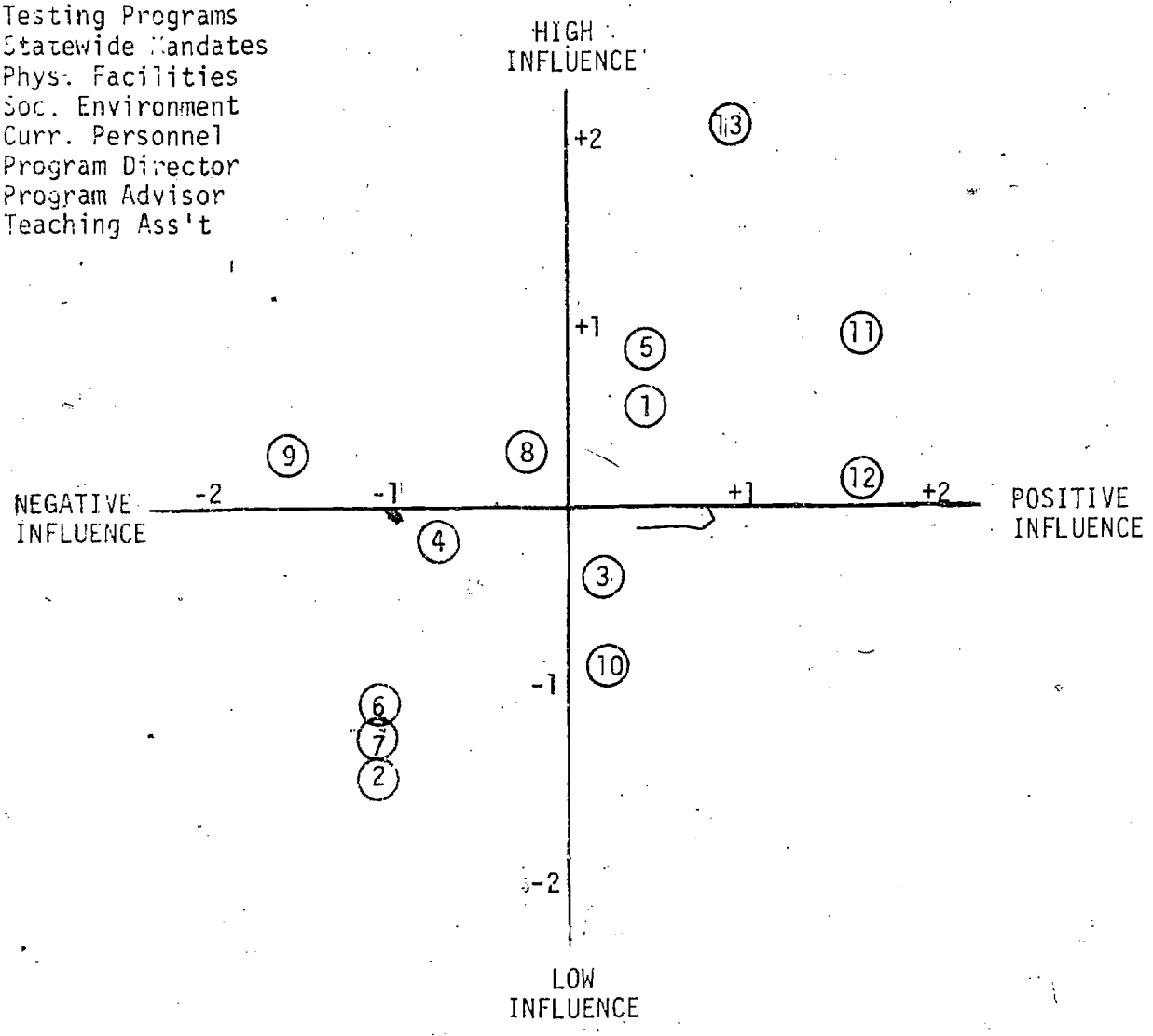


Figure 4.2 Plots of z scores for forces that influence teachers in Community C (N=16) using local norms.

#	FORCE
1.	Principal
2.	Cen. Off. Ad. Persnl.
3.	Other Teachers
4.	Parents
5.	The Curriculum
6.	Testing Programs
7.	Statewide Mandates
8.	Phys. Facilities
9.	Soc. Environment
10.	Curr. Personnel
11.	Program Director
12.	Program Advisor
13.	Teaching Ass't

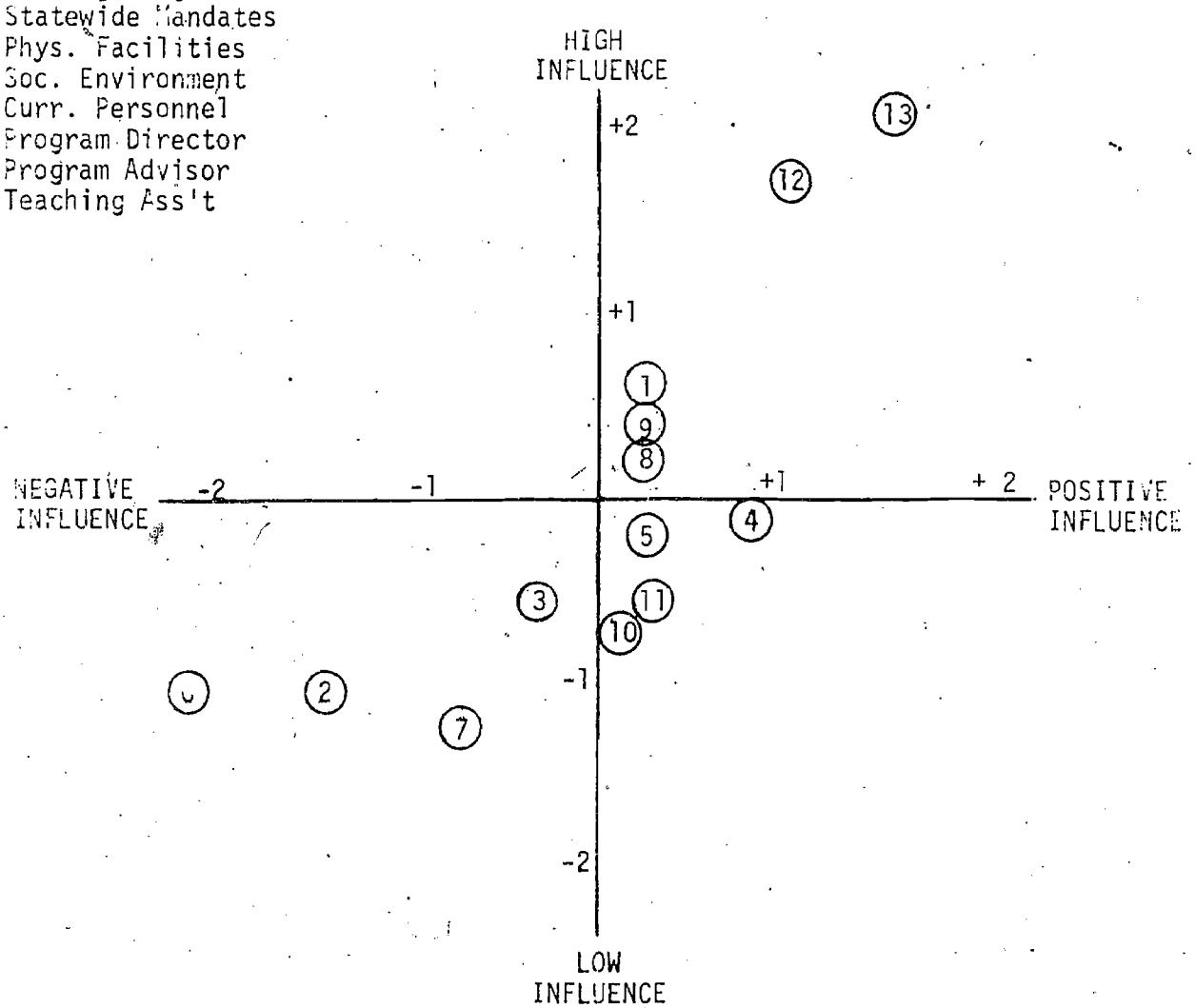


Figure 4.3 Plots of z scores for forces that influence teachers in Community D (N=15) using local norms.

#	FORCE
1.	Principal
2.	Cen. Off. Ad. Persnl.
3.	Other Teachers
4.	Parents
5.	The Curriculum
6.	Testing Programs
7.	Statewide Mandates
8.	Phys. Facilities
9.	Soc. Environment
10.	Curr. Personnel
11.	Program Director
12.	Program Advisor
13.	Teaching Ass't

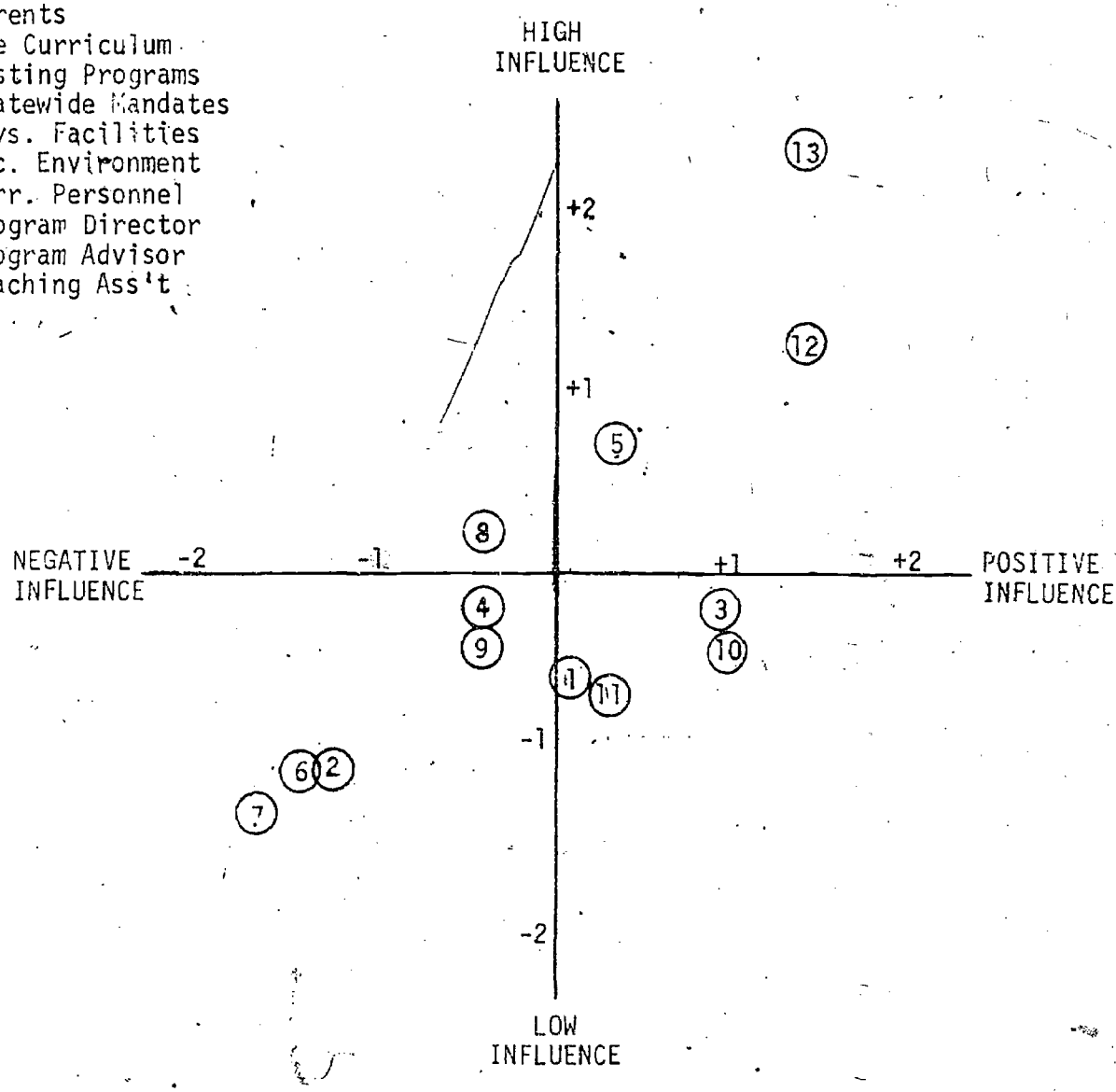


Figure 4.4 Plots of z scores for forces that influence teachers in Community E (N=21) using local norms.

#	FORCE
1.	Principal
2.	Cen. Off. Adm. Persnl.
3.	Other Teachers
4.	Parents
5.	The Curriculum
6.	Testing Programs
7.	Statewide Mandates
8.	Phys. Facilities
9.	Soc. Environment
10.	Curr. Personnel
11.	Program Director
12.	Program Advisor
13.	Teaching Ass't

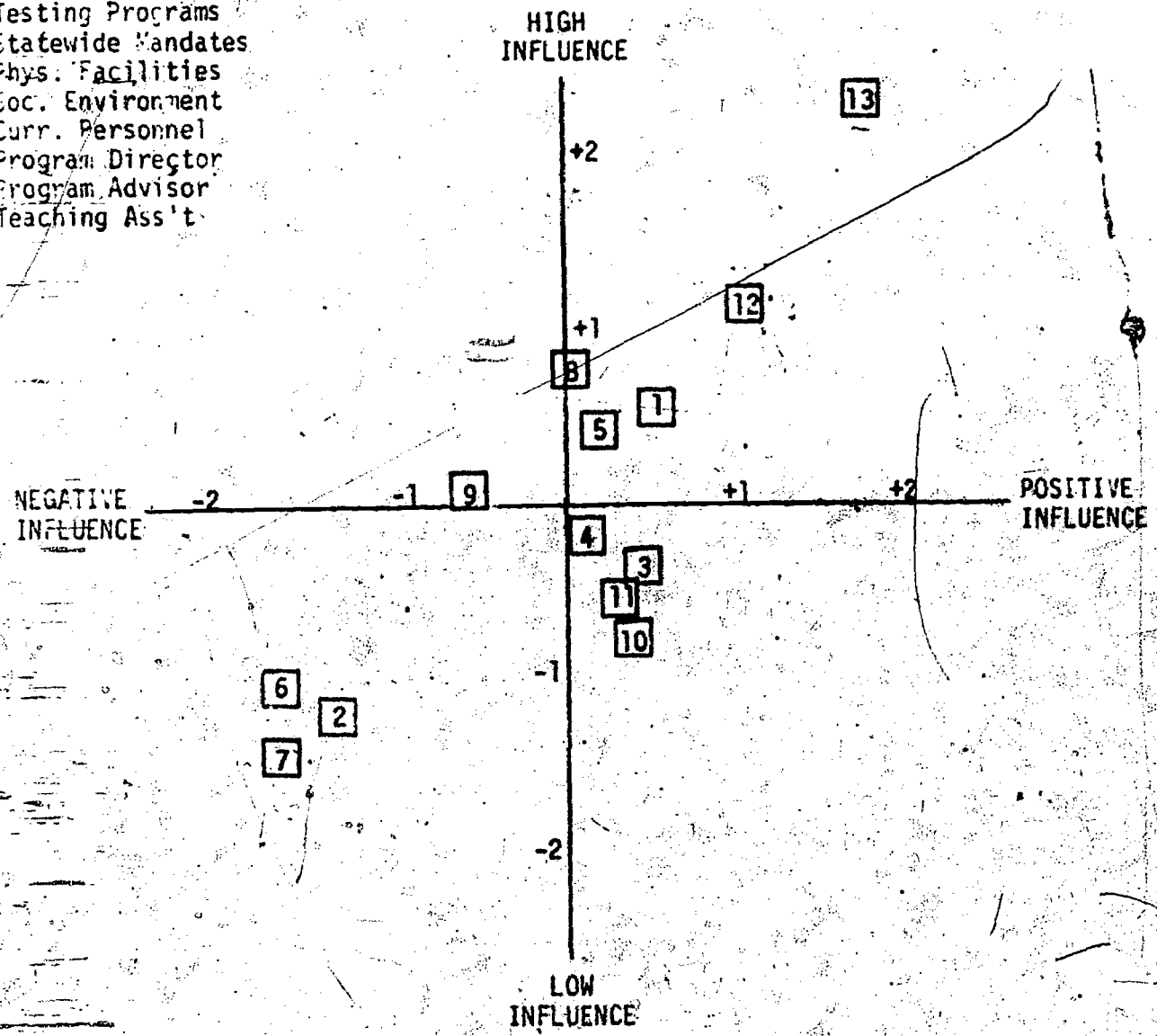


Figure 4.5 Plots of z scores for forces that influence teachers for four PV Communities. (N=93) using local norms.

No clear force emerges as being strongly negative to teachers. To some extent, the school's physical facilities (#8) in Communities C and E and the social environment (#9) in Communities B and C are perceived as both negative and influential forces.

In all communities the central office administration (#2), the testing programs (#6), and statewide mandates (#7) are perceived as very negative. These factors do not, however, represent relatively strong forces from the teachers' viewpoint.

The lower right-hand quadrant shows forces that teachers rated as positive but with little influence. In three communities the program director appears in this area. The exception is Community C where the program director is perceived as exerting a strong positive influence.

The positions of forces within communities and the comparisons of force positions and patterns of forces among various communities contribute important information for both program evaluation and development.

Of even more value is the information contained in force fields developed at the school level. This level of analysis will allow REP personnel to identify weak areas in the implementation process as seen by the teacher and to develop techniques to reduce these problems.

Further analysis of these data will also involve calculating force fields for individual communities using across-community norming data. This analysis will allow the forces as a cluster to range on the force field and not be constrained by the z score transformation process.

When z scores are developed for a community, about half the forces usually appear above the horizontal axis and half appear to the left of the vertical axis. When we use national norms to determine z scores, this restriction is not operative. Therefore, particular communities' forces can range and hypothetically

can all appear in only one quadrant. This will allow the developers another way to compare the force field in one community with other communities.

For example, the "principal" force was examined in closer detail. "Principals" (Force #1) represented a positive, influential force on the PV communities as a group (Figure 4.5). Inspection in two communities at the school level (using national norms) shows that some principals exert a very positive influence, whereas others exert a very negative influence.

Figure 4.6 shows these individual school plots for schools in Communities D and E. The capital letters shown on Figure 4.6 indicate where all the teachers in each community located the "principal" force.

When compared to all forces rated by all teachers in all communities, the "principal" force in Community D generated a positive influence in every school. Principals in Community E, however, when compared to national data, are perceived by the teachers in four of the six schools as representing a relatively negative force. The difference in spread on the high-low influence continuum is also demonstrated in the figure. The schools with principals rated as having the highest and lowest degree of influence are both in Community D. Community E principals are rather clustered on the vertical continuum. The patterns for the "principal" forces in the two communities differ considerably and are visible in the figure.

These data point to the complexities of the implementation process at the classroom level and, in particular, to the influences that affect a classroom teacher's role and behavior. The information collected by the Forces Instrument and the preliminary force field analysis reported seem to be important areas for consideration in evaluating Planned Variation programs.

DISTRICT D

School	Number
1	5
2	3
3	7
4	4
5	3

DISTRICT E

School	Number
1	5
2	5
3	7
5	3
6	6
7	4

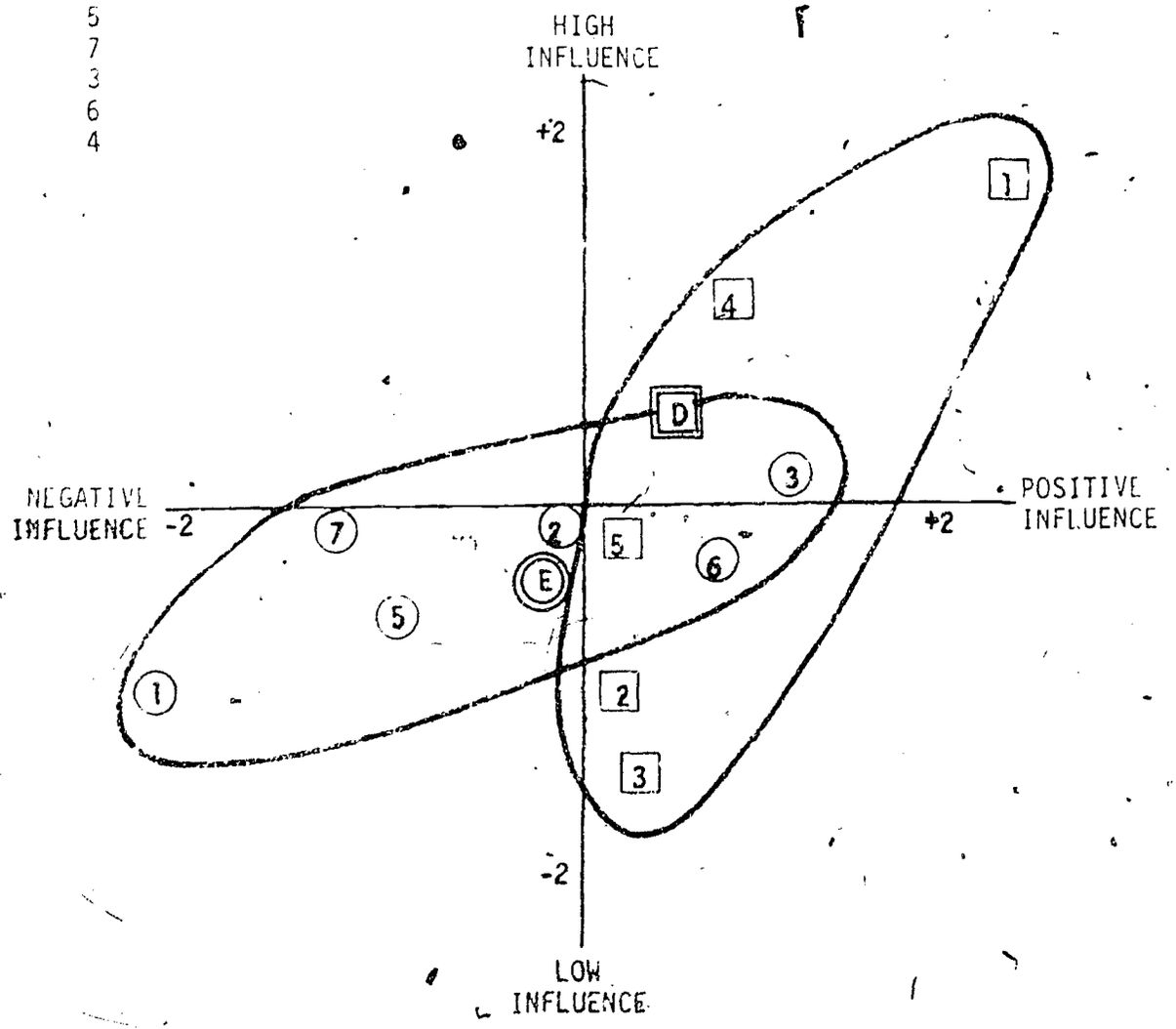


Figure 1 Principal force plotted by schools in PV Districts and D= □ E= ◯ using national norms.

Follow Through Teacher Morale

Given the experimental nature of the Follow Through REP, it is of interest to know whether or not the demands of the program have an effect on teacher morale. The REP has instituted a different concept of classroom organization, administrative heirarchy, curriculum and materials requirements, parental involvement, and teacher/teaching assistant relationships. It seems reasonable to hypothesize that teacher morale might be affected one way or another to the extent that the REP differs from the teaching standards that were traditional in the local district.

As part of an attempt to measure teacher morale, the Purdue Teacher Opinionaire (PTO) was administered in the spring of 1972 to a sample of REP Follow Through teachers in the four Planned Variation communities. The PTO is a one-hundred item inventory designed to provide sub-scores that indicate the general level of a teacher's morale on ten scales which cover a broad range of school-related topics. The PTO was standardized on a sample of 3023 teachers in Indiana and Oregon. The nature of this sample is not reported in detail, but there are reasons for believing that it was different from the Planned Variation sample, which serves primarily low socio-economic areas in large and medium-sized cities.

The basic data are presented in Table 1.7 where means and standard deviations are given for the four Planned Variation communities and for the PTO norming sample. An analysis of variance test across the four districts for each of the PTO sub-scores and for the total score is also presented.

The data for the Planned Variation communities are not very different from the data reported for the PTO norm group when the total scores are compared. For the

TABLE 4.7

Follow Through Teacher Morale in Four Planned Variation Communities: Means and Standard Deviations on Ten Scales of the Purdue Teacher Opinionaire
May, 1972

PURDUE FACTOR	Community Means (SD) B	C	D	E	For Communities	Purdue Norms*	P**
1. Teacher rapport with principal	63.9	56.1	64.6	67.5	61.7	62.3	NS
(SD)	(14.7)	(21.2)	(14.1)	(18.0)	(17.0)	(13.1)	
2. Satisfaction with teaching	69.8	70.1	68.0	72.1	70.1	69.0	NS
	(9.0)	(6.4)	(5.9)	(5.7)	(7.2)	(8.3)	
3. Rapport among teachers	47.2	43.7	43.5	48.3	46.1	41.8	.01
	(8.2)	(7.7)	(7.9)	(7.5)	(7.8)	(6.3)	
4. Teacher salary	19.3	20.3	19.8	23.4	20.0	18.6	.001
	(4.2)	(4.2)	(4.4)	(2.3)	(4.5)	(5.3)	
5. Teacher load	35.5	38.1	34.1	31.4	34.7	35.0	.01
	(5.0)	(4.0)	(5.3)	(6.9)	(5.8)	(5.9)	
6. Curriculum issues	14.8	14.6	15.3	16.9	15.4	14.8	NS
	(3.2)	(3.8)	(2.5)	(3.1)	(3.3)	(3.4)	
7. Teacher status	23.2	24.5	23.1	24.1	23.7	23.5	NS
	(5.0)	(3.1)	(4.8)	(4.3)	(4.4)	(5.2)	
8. Community support of education	12.4	12.6	13.6	14.3	13.2	14.6	NS
	(3.8)	(3.2)	(3.1)	(4.1)	(3.7)	(3.6)	
9. School facilities and Services	15.9	17.4	15.6	16.1	16.2	13.5	NS
	(2.8)	(1.6)	(3.3)	(3.5)	(2.9)	(3.8)	
10. Community pressures	17.3	17.4	16.1	15.9	16.7	16.4	
	(1.6)	(1.5)	(1.9)	(3.3)	(2.3)	(2.8)	
Total Score	319.7	306.2	304.0	323.9	314.3	312.5	NS
	(40.1)	(35.9)	(29.0)	(34.4)	(36.3)	(38.3)	
N	28	17	16	24	85	3023	

*Source: Bentley, R.R. and A.M. Rempel, Manual for the Purdue Teacher Opinionaire, Purdue Research Foundation: West Lafayette, Indiana, 1970.

**Based on a one-way analysis of variance across four communities.

ten sub-scores the data also appear to be not very different except that eight of the ten sub-scores are slightly higher for the Planned Variation teachers taker as a whole. We feel that, given the nature of the PTO norm group, these results are favorable to the Planned Variation teachers are not very different from the norm group. Within the limits of the PTO and the Planned Variation sample, we feel the data indicate that Planned Variation teachers are about as satisfied with their employment and professional circumstances as the PTO norming teachers.

Analysis of the PTO data across districts indicates that there is a significant difference for the three scales representing "Rapport Among Teachers," "Teacher Salary," and "Teacher Load." Though there are differences among the four communities on the "Rapport Among Teachers" and "Teacher Salary" scales, inspection of the community means indicates that seven of the eight means are above their respective PTO norming means.

Everything considered, we can report that teacher morale in the four REP communities is not very different from the morale of a large, but rather different, sample of teachers who labor under presumably different circumstances. This may indicate that a new program such as the REP, which deviates radically from the traditional model, can be implemented without having severe negative effects on teacher morale.

Head Start Classroom Ratings

At the end of the 1970-71 school year, the Head Start Program Advisors of each of the four Planned Variation communities evaluated the implementation level of each classroom. They rated each classroom for the beginning and the end of the school year on nine areas of REP procedures plus an overall implementation. The rating was

constructed on a five-point scale:

"1" means low, minimum standards are not met;

"2" means below average;

"3" means average--some procedures in the area implemented; some not implemented;

"4" means above average;

"5" means high, all procedures in the area implemented.

Table 4.8 indicates the average rating across all Head Start classrooms in all Planned Variation communities for the beginning and the end of the 1970-71 school year. The Program Advisor in Community E did not provide any evaluation data for the beginning of the school year. Therefore, for Community E there is no indication of the change of implementation level from the beginning of the year to the end of the year. For all other communities, such a change is indicated.

The Program Advisors in all four communities felt that their teaching staff had implemented REP procedures at a level that was above average by the end of the 1970-71 school year. The overall year-end rating for communities B, C, D, and E was 4.1, 4.0, 4.2 and 4.0 (all above average). Comparing only the beginning of the year rating, Community C classrooms were rated slightly below average in all areas, Community B classrooms were rated slightly below average in six of the nine areas, whereas Community D classrooms were rated average in all areas.

Teachers were given slightly higher ratings in the areas of "Classroom Control" and "Learning Relationships" than teaching assistants.

The Program Advisors gave the beginning of the year rating at the end of the school year; thus, they had to rely on memory of the teachers' earlier performance. Nevertheless, the ratings do reflect whether the Program Advisor feels the teacher has improved in her use of REP procedures during the year. In short, the data presented in Table 4.8 give a general picture of how well the REP procedures were

implemented, as judged by each Program Advisor in her community. The Head Start classrooms implemented the REP procedures at a level that was considered above average by the respective Program Advisor in each community.

TABLE 4.8

Head Start Classroom Rating in
Planned Variation Communities
1970-71

Responsive Process	Community B (N=8) Beg.	End	Ch.	C (N=12) Beg.	End	Ch.	D (N=6) Beg.	End	Ch.	E (N=9) Beg.	End
Room arrangement	3.3	4.1	0.8	2.3	3.9	1.6	4.0	4.3	0.3	-	4.3
Facilities	3.3	4.1	0.8	2.2	3.8	1.6	3.5	4.3	0.8	-	4.6
Classroom control (teachers)	2.3	4.3	2.0	2.6	4.1	1.5	3.3	4.3	0.2	-	4.2
Classroom control (teaching assistants)	2.1	4.0	1.9	2.3	3.6	1.3	2.8	3.5	0.7	-	4.2
Learning relationships (teacher)	2.6	4.0	1.4	2.7	4.3	1.6	3.5	4.2	0.7	-	4.3
Learning relationships (teaching assistants)	2.3	3.6	1.3	2.3	3.8	1.5	3.2	3.8	0.6	-	4.4
Freedom of children to come and go	2.3	4.1	1.8	2.3	4.0	1.7	3.7	4.7	1.0	-	4.6
Planning	2.7	4.4	1.7	2.6	4.3	1.7	3.7	4.2	0.5	-	3.7
Small-group time	2.9	4.1	1.2	2.3	4.1	1.8	3.5	4.2	0.7	-	3.9
Overall rating of classroom	3.0	4.1	1.1	2.5	4.2	1.7	3.5	4.2	0.7	-	4.0

The Stanford Research Institute Classroom Observation Instrument

This section focuses on classroom observation data collected by the Stanford Research Institute (SRI). The underlying rationale for presenting these data is the belief that the experiences which a child has in the classroom both offer evidence of program implementation and are, in and of themselves, valuable outcomes of the program. For example, one process variable explored is child-initiated interaction. If we find that REP Planned Variation children are initiating interaction more frequently than comparison children, this not only indicates that the program is being implemented successfully in this area, but the very fact that the children are initiating interaction in the classroom is a valid outcome in itself.

The Classroom Observation Instrument (COI), developed by SRI, is a complex instrument designed to be administered by a trained observer. The COI is a sophisticated instrument which provides three types of information. The first, the Physical Environment Information section, is filled out once for a given classroom and yields information about room arrangement, classroom displays, building condition, playground facilities, etc. The second, the Classroom Checklist (CCL), is filled out four times an hour and provides information about ongoing activities and the grouping of children and teachers in the classroom.

The final portion of the instrument, called the Five-Minute Observation (FMO), is the most important part of the instrument and will be the focus for this report. Four times an hour, immediately following the recording of the CCL, the observer records for five minutes classroom behavior in interaction units. Each interaction unit contains four parts. "Who," "To Whom," "What," and "How." The first two parts tell who the initiator and the receiver of the action was. The third classifies the action, and the fourth gives additional information about the action.

The SRI Classroom Observation Instrument was designed to evaluate implementation

objectives of a number of different Head Start and Follow Through programs, of which the REP is just one. Consequently, all of the variables which the instrument measures are not of equal importance to all programs, since the programs have differing objectives. Only those variables which relate to a given program's implementation objectives can appropriately be utilized in evaluating the effectiveness of that program.

Data on Head Start Classrooms

In April, 1970, a locally recruited and specially trained SRI field worker observed five Head Start classrooms (three Responsive Program and two comparison) in Community B using the SRI Classroom Observation Instrument (COI).

Table 4.9 contains data on process variables which relate to the objectives of the REP. These include child-initiated interaction, adult-initiated interaction, child direct or choice requests, child informing self with material, and adult-initiated interaction with individual child. Observation data are presented for both REP and comparison classrooms.

Child-Initiated Interaction vs. Adult-Initiated Interaction. The most significant finding in terms of program implementation is an indication that there is a greater proportion of child-initiated interaction in REP Head Start classrooms than in comparison classrooms. Of 3,511 interactions recorded in REP classrooms, 1644, or 47%, were child-initiated and 1243, or 35%, were adult-initiated. In comparison classrooms the pattern was reversed: of 2,504 interactions recorded, 39% were child-initiated, 43% were adult-initiated. These results suggest successful implementation of the program in this domain.

Quality of Child-Initiated Interaction. It is possible to analyze further the quality of child-initiated interaction by examining what kinds of interaction the children are initiating. One categorization of child-initiated interaction is direct vs choice requests. A "direct request" is a question or a statement with a speci-

fic acceptable response (e.g., "Teacher, I want to paint"). A "choice request" is a question that is open-ended in the sense of having more than one acceptable response (e.g., "Teacher, what do you think I have in the bag?").

In the REP classrooms 8% (266 of 3511) of the total interactions were child-initiated direct or choice requests as compared to 2% (46 of 2574) for comparison classrooms. When calculated as a percentage of just the child-initiated interactions, child-direct or choice requests were 16% (266 of 1644) of the total child-initiated interactions in REP classrooms and 6% (46 of 786) in comparison classrooms. Looked at another way, the data show that there is more child question-asking behavior in REP classrooms, a conclusion which speaks positively for program implementation.

Another category of child-initiated interaction is behaviors in which the child initiates interaction with the physical environment, i.e., with toys, games, books, etc. In REP classrooms, because there is an emphasis on free exploration, a greater number of observations in this category were expected. The results, however, are equivocal. When the occurrence of child-initiated interactions with the environment is taken as a percentage of the total, in the REP classrooms this type of behavior occurred 22% (783 of 3511) of the time and in comparison classrooms 18% (451 of 2574) of the time. However, when the occurrence of child-initiated interactions with the environment is taken as a percentage of just child-initiated interactions, the figure for the REP classrooms is 48% (783 of 1644) and for the comparison classrooms 60% (451 of 786).

An important type of child-initiated interaction occurs when a child informs himself with materials that are in the classroom. A total of 114 observations made in the REP classrooms were classified as "child informing himself with material" while there were zero (0) such observations in the comparison classes. These data suggest that the REP's objective of facilitating children's learning through interaction with their environment is being implemented in REP classrooms.

TABLE 4.9

Amount and Kind of Interaction in Responsive and in Comparison Head Start Classrooms

	RESPONSIVE PROGRAM			COMPARISON		
Type of Interaction	Number	% of Total	% of Child-Initiated Interactions	Number	% of Total	% of Child-Initiated Interactions
TOTAL	3511	--	--	2574	--	--
ALL CHILD-INITIATED	1644	47%	--	786	30%	--
Child direct or choice request	266	8%	16%	46	2%	6%
Child with physical environment	783	22%	48%	451	18%	60%
Child informing self with material	114	4%	7%	0	0%	0%
			% of Adult-Initiated Interactions			% of Adult-Initiated Interactions
ALL ADULT-INITIATED	1243	35%	--	1104	43%	--
Adult with individual child	721	22%	62%	489	19%	44%
TOTAL	3511	--	--	2574	--	--

Note: Percentages do not total 100 as those interaction categories which do not directly apply to the Responsive Program have been omitted.

Quality of Adult-Initiated Interaction. The REP also has implications for the nature of adult-initiated interaction. Because the REP emphasizes that the adult should respond to the child as an individual, it was expected that the teacher and other adults would initiate activity with an individual child more often in the REP classrooms than in comparison classes. The observation data show that in the REP 22 (772 of 3511) of the total interaction was adult-initiated interaction with an individual child; in comparison classrooms the percentage of the total interaction was 19. When the amount of adult-initiated interaction with an individual child is viewed as a percentage of just the adult-initiated interaction, in REP classrooms 62 of the adult-initiated interaction was with an individual child and in comparison classrooms 44% of the adult-initiated interaction was with an individual child. These figures suggest that the REP classrooms were successful in focusing adult interaction on the individual child.

Data on Follow Through Classrooms

During the Spring of 1971, an SRI observer observed six REP Follow Through classrooms in Community B. Comparable classrooms in Community B were not available for observation; therefore, two similar classrooms were selected in a neighboring city to complement the six classrooms observed in Community B. The analysis which follows must necessarily assume that SRI carefully considered the options available for contrast purposes and then chose the most suitable candidates.

Analysis of REP Follow Through Classrooms in Community B. The discussion which follows is based on mean frequencies of what was observed during the Five-Minute Observation periods. The mean frequency is computed by summing all FMO's for a given classroom and dividing by the number of FMO's for a particular item. For this analysis between 16 and 39 FMO's were completed per classroom. Through the technique of factor analysis, SRI has reduced the large amount of observation data to 41 variables which represent interpretable constructs. The following analysis is based on 28 of these variables. See Table 4.10 for the raw data.

Before we discuss the relationship of the 28 FMO factors, we should mention the adult-child ratio in the classroom. One facet of the REP is the employment in the classroom of full-time paid teaching assistants (who are usually parents of enrolled children) to supplement the activities of the teacher. In the REP, every effort is made to utilize the teaching assistant as a teaching resource in her own right. Although this commitment is not always honored, the teaching assistant is more than a mere helper who straightens up, cleans the chalk board, and serves snacks. This is the substance of the idea of implementation. The presence of the teaching assistant is clear from the data on adult-child ratios for Community B presented in Table 4.10.

TABLE 4.10

1970-71 SRI | Follow Through Classroom Observation Data[a] for Community B

		RESPONSIVE PROGRAM CLASSROOMS								
		School 1			School 2			Comparison Classrooms		Mann-Whitney U Test
	CODE	A (K)	B (K)	C (1st)	D (K)	E (1st)	F (1st)	X (K)	Y (K)	
Adult-child ratio		.136	.111	.162	.130	.083	.078	.038	.049	
Total Five-Minute Observations		20	17	31	16	33	36	39	20	
FACTOR TITLES										
Teacher informing child symbolically	B	2.75	1.18	1.19	0.38	1.42	2.22	1.74	0.00	
Adult direct questioning of child	C*	1.25	1.24	2.16	3.00	2.94	2.64	3.79	1.75	
Child response to adult direct quest.	C*	1.25	.94	1.87	2.69	2.18	1.94	3.62	1.60	
Adult praise & corrective feedback	B	1.80	2.71	2.29	3.75	1.73	1.64	2.69	1.65	
Child response followed by adult feedback	A	.15	.18	.10	.44	.03	.06	.62	.15	
Adult informing child	B	3.40	3.29	4.81	1.88	2.61	3.56	3.72	2.85	
Adult asking child "thought" questions	B	.45	1.59	.90	1.50	.91	.67	1.36	.20	
Adult teaching with concrete objects	B	0.00	.47	2.68	.25	.15	.61	.00	.00	P .07
Adult acknowledgment to child	B	1.15	1.71	.65	2.25	1.12	1.03	1.90	.70	
Child self-learning w/concrete objects	A	5.05	3.71	.16	2.31	.09	.64	1.79	5.50	
Child self-learning	A	.15	1.59	2.16	2.25	1.42	1.47	2.36	.15	
Child teaching another child	A	.20	.59	.03	1.00	.73	.67	.03	0.00	P .06
Child self-learning with symbols	A	.15	.53	2.16	0.00	1.42	1.47	.21	0.00	
Child asking questions	A	.90	1.06	.90	1.31	1.03	.97	.33	.80	P .04
Child self expression	A	19.55	22.35	16.71	16.31	16.21	16.39	7.95	19.55	
Adult communication focus:one child	A	6.35	8.06	7.00	8.50	6.24	5.08	7.18	3.05	
Adult communication focus: small group	B	1.65	2.88	1.23	2.94	2.24	1.69	.31	.40	P .04
Adult communication focus: large group	B	6.85	4.47	12.32	4.56	7.27	9.75	13.69	10.45	P .07
Adult praise/acknowledgment of child	A	1.50	1.88	1.03	3.00	1.36	1.44	2.51	.90	
Adult "positive" corrective feedback	A	.20	.76	.87	.38	.27	.19	.08	.15	P .04
Adult negative corrective feedback	C*	.10	.06	.39	.25	.09	0.00	.08	.60	
Adult "negative" behavior	C*	.10	.06	.84	.38	.27	.03	.08	.60	
Child "negative" behavior	C*	.45	.53	.32	.19	.12	.08	0.00	0.00	P .04
"Negative" behavior	C*	.55	.59	1.16	.56	.39	.11	.10	.60	
Adult "positive" affect toward children	B	.15	.06	.29	.19	.21	.06	.13	.10	
Child "positive" affect toward adults	B	.45	.88	.13	.56	.36	.28	.28	.10	P .10
All "positive" affect	B	.85	1.06	.45	.75	.67	.47	.44	2.35	
Child "positive" affect	B	.70	1.00	.16	.56	.45	.42	.31	1.10	

[a]Data represent "relative frequencies in a five minute period."

*The ranks of these items were reversed for the Friedman analyses.

CODES: "A" represents those items on which REP classrooms would show the greatest difference.
"B" represents those items where a moderate amount of difference would appear.
"C" represents those items which are of least importance to the REP.

The ratio of children to adults averages about 9:1 for the REP classrooms and about 25:1 for the comparison classrooms. Though this contrast indicates a favorable ratio for the REP, it also may influence the data for the 28 observation variables. For instance, the observer may tally more incidents of "adult communication, focus, small group" for the REP classroom simply because there are more adults with whom to form small groups. If such is the case, and it is, then one aspect of the REP can be said to be implemented and working. It can also be claimed that this aspect of the program has been recorded and validated repeatedly by an independent evaluator.

A Comparison of Responsive Program Classrooms with Traditional Classrooms on Selected SRI Observation Constructs. As indicated by the headings in Table 4.10, observation data were gathered for three kindergarten and three first-grade classrooms in Community B and two kindergarten non-Follow Through comparison classrooms in a neighboring city. The number of classrooms seems small, but we will use a comparing procedure which is independent of sample size.

The questions we would like to answer are:

1. Are there differences among the eight observed classrooms which might show up when the 28 constructs are examined as a whole?

2. Do sub-sets of the SRI constructs which are of differing degrees of importance to the REP distinguish between the REP and the comparison program?

3. Which individual SRI constructs distinguish the REP classrooms from the comparison classrooms?

In answer to Question one, we must reason thus: If each of the constructs purports to measure the relative frequency of occurrence of an event of interest, and if we order the direction of the frequency of events in a way that is predictable from the logic of the REP, then if the REP is truly different from the

comparison program the increased frequency of events ought to show up statistically. We ranked the eight classrooms from one to eight with one corresponding to the lowest frequency and eight corresponding to the highest frequency for each of the 28 constructs. We then used the non-parametric Friedman two-way analysis of variance by ranks statistical procedure (Winer, 1971) to analyze column (or classroom) differences in observed activity.

The data yield a Friedman statistic of 14.47 which is distributed as chi-square with 7 degrees of freedom and has a $p < .05$. We may infer that there is a difference between REP classrooms and the comparison classrooms observed in Community B. The mean ranks are presented in Table 4.11 and in graph form in Figure 4.7, where we have grouped the K and 1st-grade classes for convenience, with means of the group ranks indicated for comparison purposes. Inspection of the means in the table and in the graph indicate that the main difference between the REP and comparison program is at the kindergarten level. Post hoc comparisons will not be performed. We will rest our case here, making the point that the SRI observation constructs, when considered as a whole, do differentiate the particular classrooms reported.

Question two can be answered the same way question one was answered. We have divided the constructs into three groups on the basis of the implications the REP may have for the construct and vice-versa. The groupings are indicated by the codes A, B, and C in the column labeled Code in Table 4.10. The mean ranks are given in Table 4.10 along with the Friedman statistics.

As it turns out, the ten constructs judged to be most important to the REP had a Friedman statistic of 15.28 which, with 7 degrees of freedom, has a $p < .05$. On this level of grouping, the SRI constructs can be said to differentiate among classrooms. Inspection of Figure 4.8 will confirm that again the major difference

TABLE 4.11

Mean Ranks and Friedman Statistics for
Grouped SRI Observation Data for Community B

	RESPONSIVE PROGRAM CLASSROOMS						COMPARISON CLASSROOMS		FRIEDMAN STATISTIC*	P
	School 1			School 2						
	A (K)	B (K)	C (1st)	D (K)	E (1st)	F (1st)	X (K)	Y (K)		
Total (28 items)	4.63	5.55	4.14	5.16	4.18	4.46	4.52	3.36	14.47	.05
Most Important (Code A, 10 items)	4.30	6.20	4.50	6.15	3.70	4.00	4.25	2.90	15.28	.05
Moderately Important (Code B, 12 items)	4.67	5.46	4.42	5.33	4.42	4.00	4.46	3.25	6.94	NS
Not Important (Code C, 6 items)	4.50	4.50	3.17	3.67	4.83	6.50	5.75	3.08	10.15	NS

*with 7 degrees of freedom.

appears to be between kindergarteners. The mean of the group ranks has been indicated for comparative purposes.

For the twelve constructs judged to have "moderate" importance for the REP, the Friedman statistic was not significant; however, inspection of the group mean ranks in Figure 4.9 indicates that differentiation may be also taking place along the lines of the most important constructs discussed above.

For the six constructs judged to have minimal importance for the REP the Friedman statistic was not significant. Inspection of Figure 4.10 shows a mixed distribution of mean ranks and group mean ranks, indicating the inability of this group of SRI constructs to differentiate classrooms.

Question three (Which individual SRI constructs distinguish the Responsive classrooms from the comparison classrooms?) can be answered by applying the non-parametric Mann-Whitney U test to each item to test whether the two groups of classrooms have been drawn from the same population.

The results of this analysis are presented in Table 4.10 where it will be seen that eight of the 28 variables have U statistics with probabilities of less than .10. When these items are classified by their importance to the REP it is found that seven are of moderate or great importance and one is not very important to the program as a whole. Indeed, it can be argued that the latter item, although not conceptually important, is indicative of implementation. The fact that patterns of interaction in the REP classroom have been changed may give the observer "more to observe" than in the traditional classroom where students are usually arranged more rigidly in rows.

The following conclusions can be drawn from the above analysis:

1. Data collected using the SRI observation procedure do differentiate between Planned Variation Community B and a neighboring contrast community.

2.-a. The sub-set of constructs judged to be most important to the implementation of the REP differentiates between Responsive classrooms and comparison classrooms. Since these are the variables that reflect stated REP objectives, this finding is useful in determining whether or not the REP is being implemented. The REP has been implemented and has brought about desirable change in the classroom.

2.-b. The sub-set of constructs judged to be of lesser importance to the REP failed to differentiate between Responsive and comparison classrooms, although the constructs of moderate importance manifest a trend in the predicted direction.

3. On an item level it was found that of the 28 SRI variables, eight differentiated the REP classrooms from the comparison classrooms on the basis of a statistical test. Children in the REP classrooms asked more questions. There were also more occurrences of one child teaching another child. These data are consistent with the Head Start SRI observation data. As with the Head Start observation data, the Follow Through classroom observation data also provide evidence of implementation of the REP.

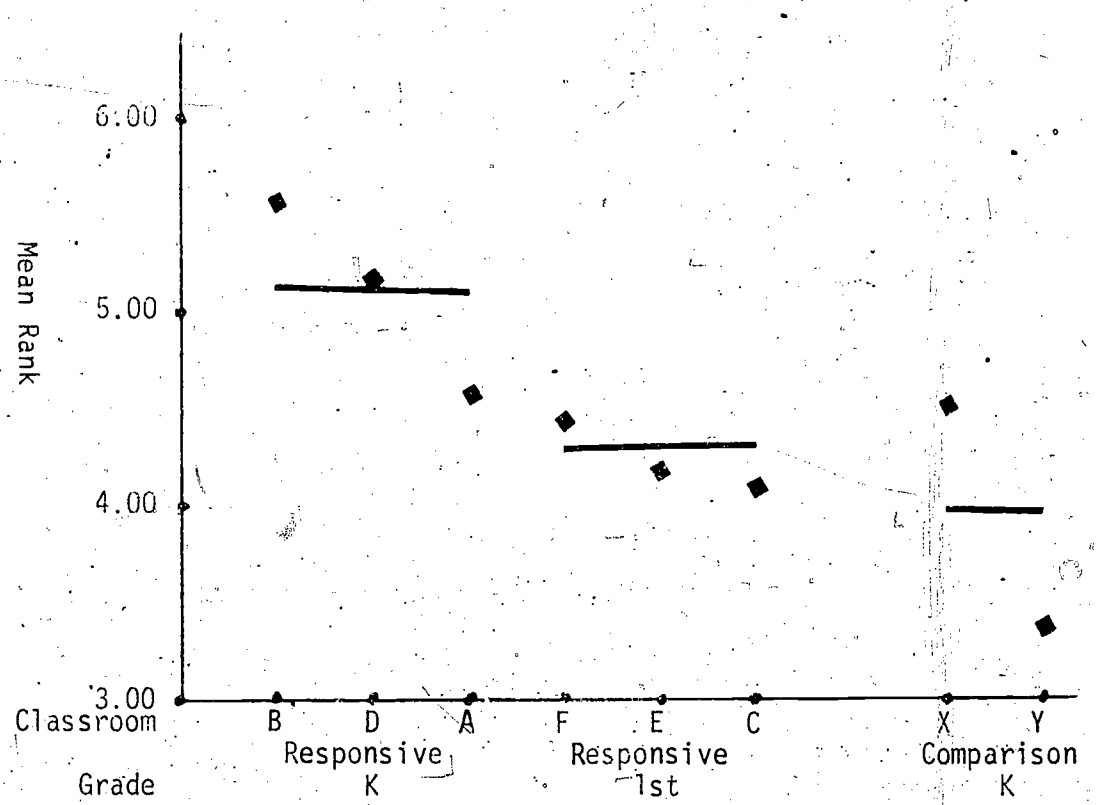


Figure 4.7. Mean ranks for REP and comparison classrooms on 28 SRI observation constructs.

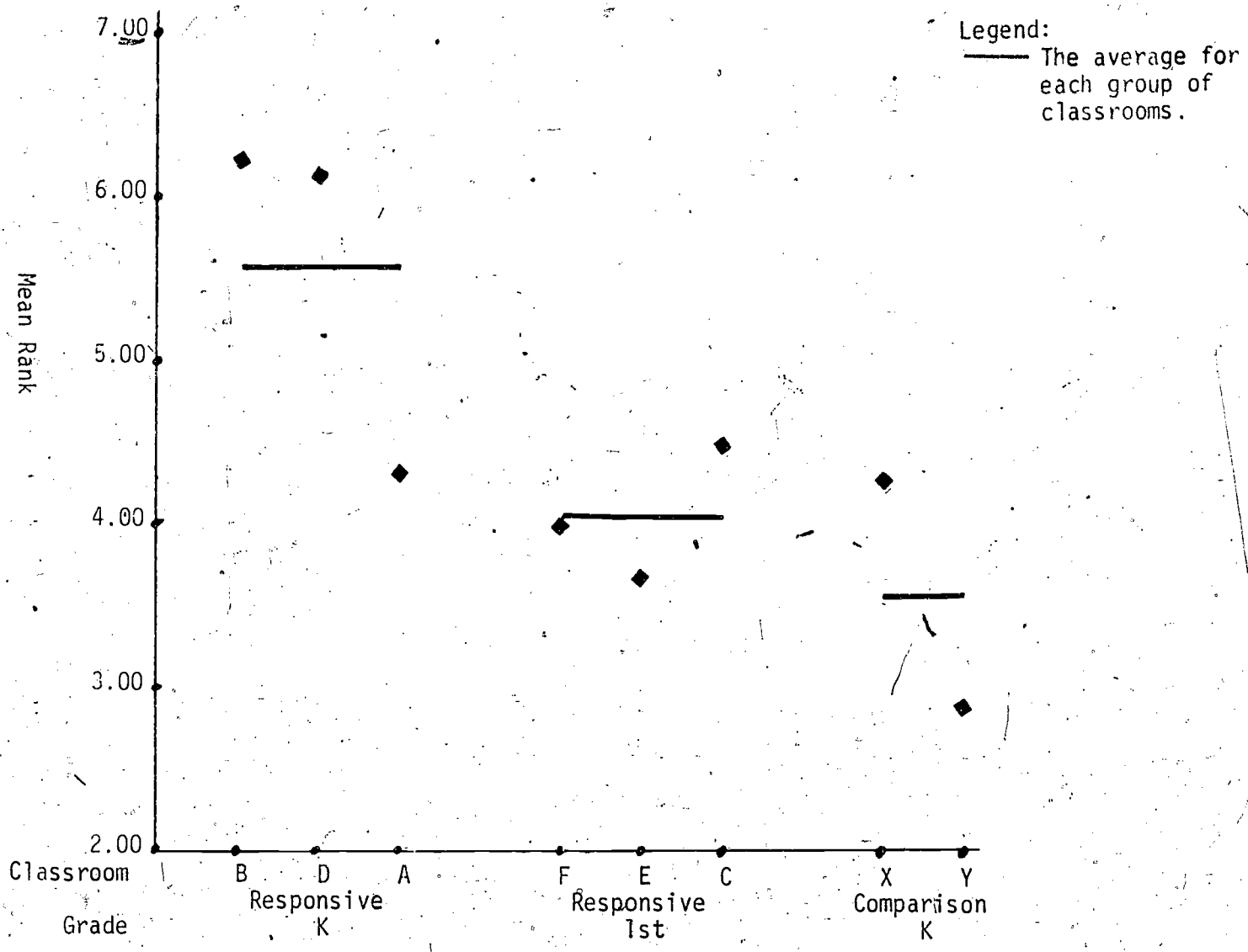


Figure 4.8 Mean ranks for REP and comparison classrooms on ten SRI observation constructs judged to be of most importance to REP implementation.

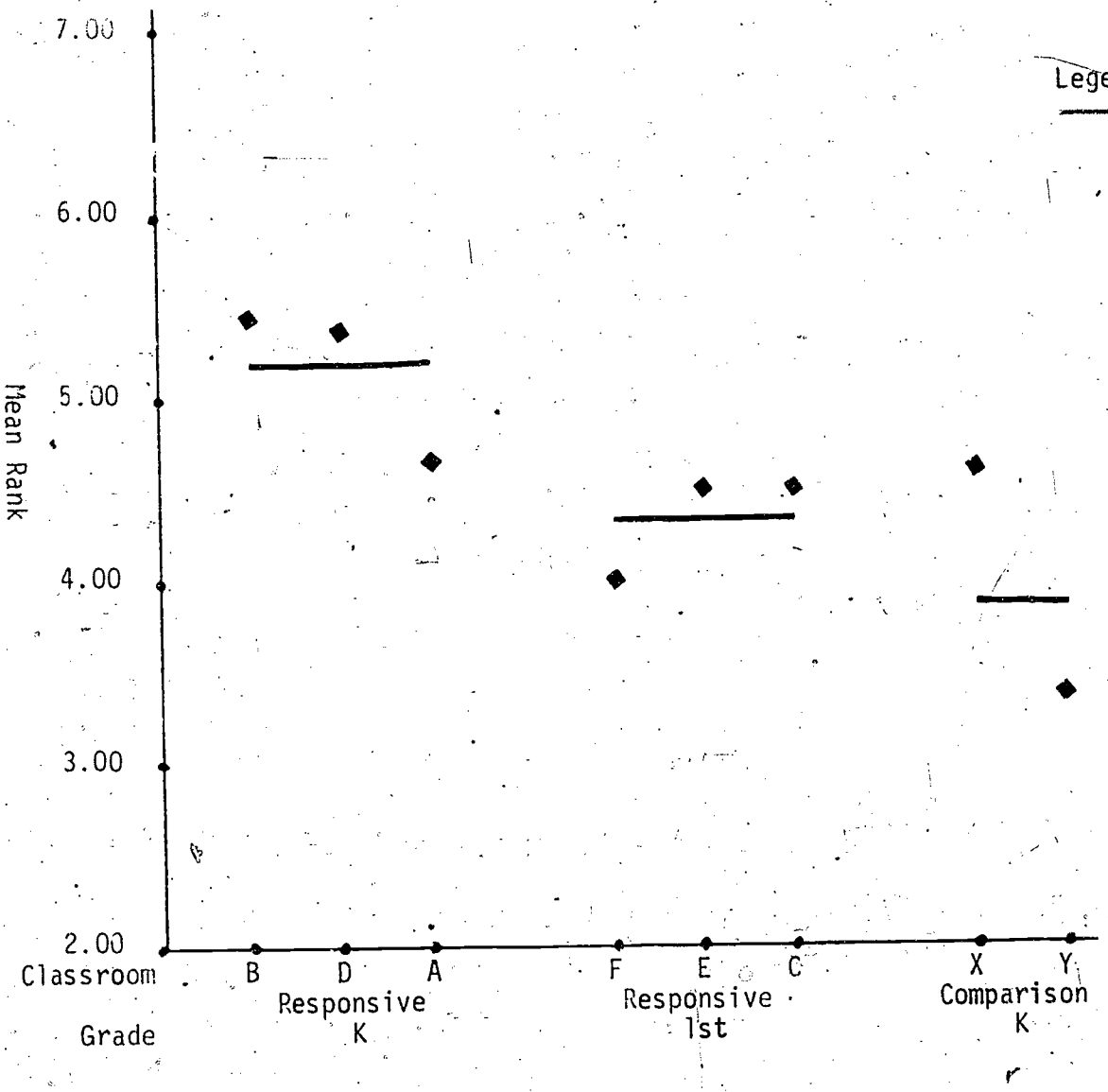


Figure 4.9 Mean ranks for REP and comparison classrooms on twelve SRI observation constructs judged to be of moderate importance to REP implementation.

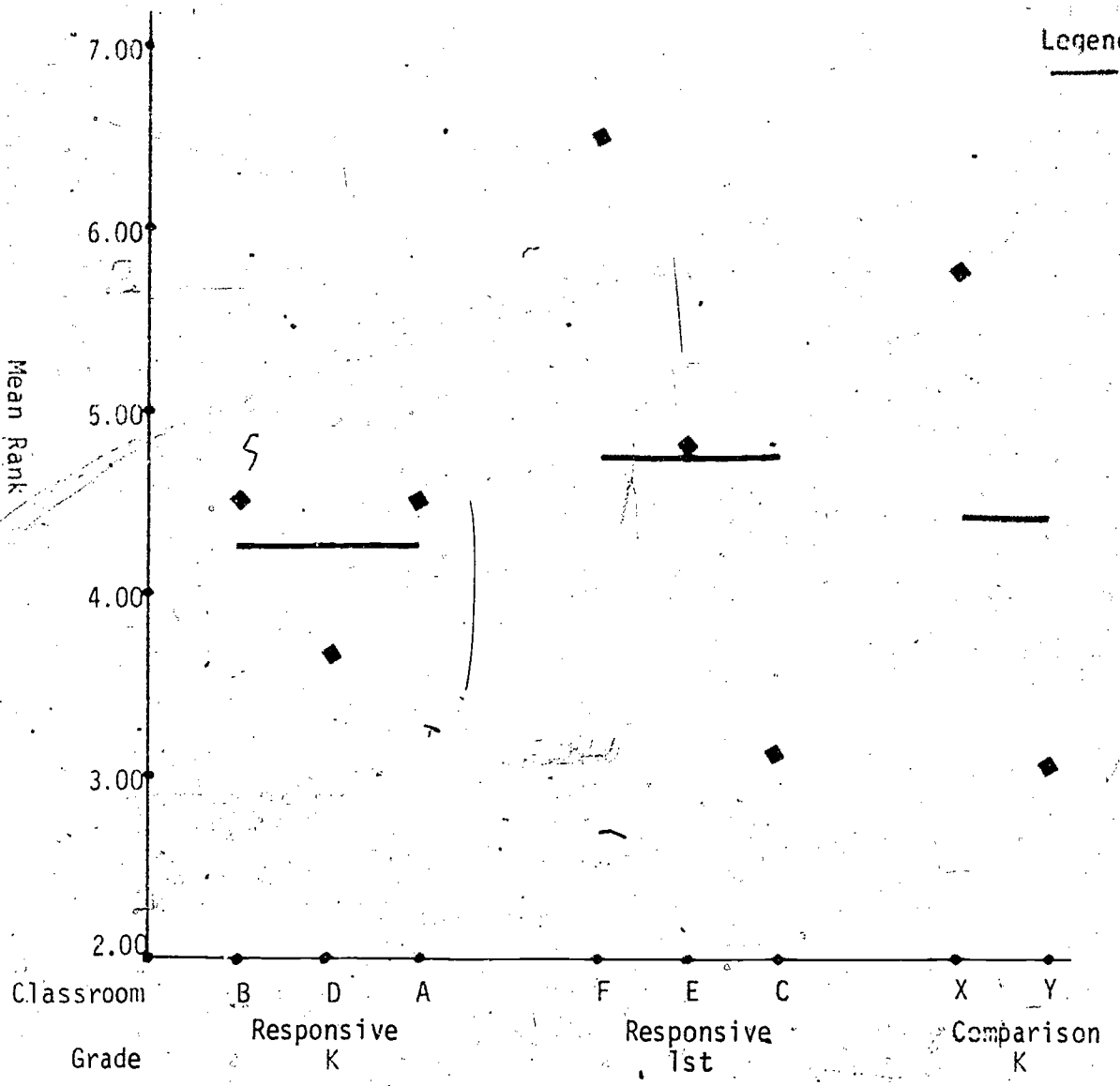


Figure 4.10 Mean ranks for REP and comparison classrooms on six SRI observation constructs judged to be of little importance to REP implementation.

Learning Booth Implementation

The Learning Booth is a pre-structured learning activity for kindergarten children in REP classrooms. A Laboratory publication, "Guide for Learning Booth Attendants" (Barnes et al, 1970), describes the objectives and the activities of the Learning Booth in detail. Briefly, a Booth Attendant would ask each kindergartener once a day about two or three times a week if he or she would like to play with a typewriter. If the child agrees, the attendant leads the child to a booth equipped with an electric typewriter and other related materials. The child can play with the typewriter for 10 minutes if he wishes; he can also leave early or extend his time. The Booth Attendant can also stop playing with the child at the typewriter when he notices that the child begins to lose interest. Appendix C includes a description of the entire sequence of the Learning Booth activities and notes on the Learning Booth Program in each of the four Planned Variation communities, as documented by the Laboratory Learning Booth trainer.

Table 4.12 presents the 1971-72 children's Learning Booth achievement and capsule notes on the Learning Booth Program in each community. Children in Communities B, C, and D achieved above the standard set by the Laboratory (that 75% of the children reach Phase III (3-4) at the end of the school year). Community E had a lower achievement compared to the standard, due partly to the destruction by fire of Learning Booth materials during the school year. Booth programs have been operational in Communities B, C, and D for four years. The booth program in Community E has been in operation for only three years. Tables in Appendix C show child performance for each year of booth operation for each community. The increased percentage of children performing at the more advanced stages over the years is a clear trend for each of the four communities. In spite of the destruction of booth materials in Community E, child performance levels for Community E

are comparable to the third-year child performance levels made by children in Communities B, C, and D. In short, Communities B, C, and D have good Learning Booth programs, and Community E is developing similarly.

Learning Booth performance is related to problem-solving and the development of specific, demonstrable language-related skills. This assumption has been supported by findings from other REP Follow Through districts which indicate that achievement in the Learning Booth is related to performance on a standardized reading test (Rayder, 1972).

TABLE 4.12

Percent of Kindergarten Children Achieving at Various Phases of the Booth Sequence at the End of the 1971-72 School Year and Capsule Notes on Program Operation in 1971-72

Community	Booth Activities-Phases						Notes
	I	II	III (1-2)	III (3-4)	IV	V	
B	100	100	96	79	45	17	A competent new Senior Booth Attendant; half of the Booth Attendants were new; Booth Attendants and teaching assistants work half-time at each job; good administrative support.
C	100	100	100	99	84	46	Excellent Booth Attendants; little job turnover; good administrative support; teachers use information from the Learning Booth to assess children's needs; excellent communication between Booth Attendants and teachers.
D	100	94	92	86	81	68	Senior Booth Attendant experienced and competent; only two of the 8 Booth Attendants were new; Booth Attendants and teaching assistants work half-time in the Booth and half-time in class.
E	100	100	92	71	45	6	New Senior Booth Attendants; destruction of a FT school by fire caused a lapse of time which affected the achievement in 3 FT classes.

Summary

The data presented in this chapter indicate that the objectives for the classroom have been implemented in the Planned Variation communities.

(1) The majority of the FT teachers and teaching assistants* reported that they had good working relationships. There were few complaints by the teaching assistants that they had to do mostly menial work in the classrooms.

(2) Analyses of the strength and directions of the "Educational Forces Inventory" demonstrated that teachers perceive the Program Advisors and the teaching assistants as strong positive forces influencing their teaching. The principals are also perceived as having positive influence, but to a lesser extent. Program directors in Communities B, D and E are perceived as positive but weak influences while Community E program director is perceived as a strong positive influence. Not one force is perceived as having strong negative influence, but the schools' physical facilities in communities C and E and the social environment in Communities B and C are perceived as somewhat negative influences. In all communities the central office administration, the testing programs and the statewide mandates are perceived as relatively negative, but not strong influences.

(3) The Follow Through teachers in the Planned Variation communities have good morale as assessed by the Purdue Teacher Opinionaire.

(4) Almost all the FT teachers and teaching assistants reported that they used the major REP methods frequently in their classrooms. Aside from this self-report evidence, the Stanford Research Institute observation data also indicated that PEP classrooms have more occurrences of the program's desired process variables than the comparison classrooms. These include more child-initiated questions.

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* For HS teachers/teaching assistants' self report on working relationships, refer to HS Teacher and Teaching Assistant Year-End Survey, 1970-71 by Rhodes & Ng, FWL, 1972. HS T/TA also reported good working relationships.

and activities and more adult interaction with individuals or small groups of children. These data provide evidence that the REP gives children different educational experiences from those found in traditional classrooms.

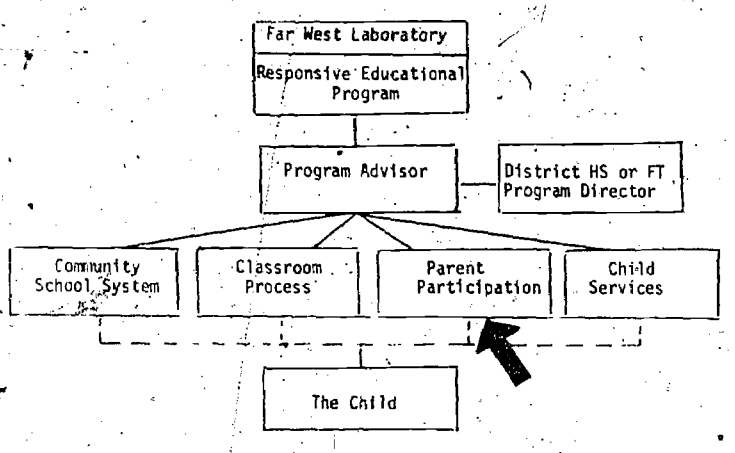
(5) The HS PAs in each community indicated that their teachers/teaching assistants had implemented the REP procedures at a level that is above average.

(6) Initial steps to involve parents in the classrooms have been taken: in all the Planned Variation classrooms there were volunteer parents working with the children and the teachers explained the REP to the parents. There are no classroom data yet to show the nature of the parent involvement in the teaching/learning process.

(7) The Learning Booth has been successfully implemented in the kindergarten classrooms in three communities and is developing adequately in the fourth.

CHAPTER 5

PARENTS



Objectives for Parents

1. To participate in the decision-making process regarding the Planned Variation program through the Parent Advisory Council (PAC).
2. To participate directly in the classroom and in school-related functions as paid employees and as volunteers.
3. To become involved in educational decision-making, realizing that parents have both the right and the responsibility to share in determining the nature of their children's education.

Data to be Presented

Sources

Community

	B		C		D		E	
	HS	FT	HS	FT	HS	FT	HS	FT
SRI Parent Interview Data 1970-71		X		X		X		X
SRI Parent Interview Data 1969-70		X						
Parent Content Questionnaire	X	X			X	X	X	X

Parents

The Planned Variation program, recognizing that the family exerts the primary influence on the child's development, aims to support the parent's role in the educational process. Parents are encouraged to become familiar with the educational program of the sponsor and involved in the curriculum both at home and at school. Furthermore, they are urged to participate in educational decision-making through such organizations as the Parent Advisory Council (PAC).* In general, it is the goal of the PV program to foster the parents' involvement with and control over their children's educational experiences.

This section, which focuses on the role of parents in the PV program, discusses interview data collected by SRI and data collected by the Laboratory concerning parents' perceptions of their roles in the educational process. Two previous sections also deal indirectly with the parent participation issue. The chapter on Program Advisors presents data that indicate how PA's spend their time. Typically PA's spent about 3% of their time (or about four hours per month) at parent meetings. The chapter on Classroom Process contains information regarding teachers' efforts to involve parents in the program. About two-thirds of the Follow Through teachers reported that they had parent volunteers working in their classrooms, and almost all of the teachers and most of the teaching assistants said that they explained the REP to the parents of their children.

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* In this report, the parent organization associated with the PV program will be referred to as the Parent Advisory Council (PAC). There is some feeling that the word "advisory" is inappropriate in so far as it implies a more restricted role than parents themselves want to or should play in the program. Consequently, some parent groups call themselves the Parent Council (PC).

1970-71 SRI Parent Interview

In the spring of 1971, National Opinion Research Corporation (subcontracted by SRI) interviewed parents of kindergarten and entering first-grade children in four PV communities. Parents of both Follow Through and non-Follow Through children were interviewed in their homes by a trained interviewer. During the interview, which lasted about an hour, parents were asked a range of questions concerning their children, their homes, their participation in the educational system, and their attitudes about a number of school-related and other issues.

The responses of both Follow Through (FT) and non-Follow Through (NFT) parents in the four PV communities to some selected questions are shown in Table 5.1. Each parent was asked if he/she were aware that his/her child was in Follow Through. Most Follow Through parents interviewed (86%) answered "yes" to this question. A few (6%) NFT parents misinterpreted the question and also answered "yes." In Community B, however, only 59% of FT parents indicated that they were aware that their children were in Follow Through, which means that parent awareness of the program is not so high in this community as other REP communities where 90% or more of the parents interviewed knew of the FT program.

Those parents who answered that they were aware of the Follow Through program were asked if they felt it was helpful to their children. As Table 5.1 indicates, the parents questioned were almost unanimous in their approval of the program.

Parents were also asked if they had heard of a group called the Parent Advisory Council. On the average, somewhat over half of the FT parents and a little over 10% of the NFT parents said they knew about the PAC. Those FT parents who answered "yes" to this question were then asked several additional questions. Among these were: Have you ever been a member of PAC? Have you ever gone to the

TABLE 5.1

SRI Parent Interview (Spring, 1971)

	Parent Responses in Percentages									
	Community B		Community C		Community D		Community E		TOTAL	
	FT (N=157)	NFT (N=163)	FT (N=94)	NFT (N=104)	FT (N=97)	NFT (N=105)	FT (N=99)	NFT (N=103)	FT (N=447)	NFT (N=475)
Aware of Child Being in F.T.	59%	3%	90%	14%	94%	4%	99%	3%	86%	6%
F. T. Helpful	99%	N.A.*	99%	N.A.	100%	N.A.	100%	N.A.	99%	N.A.
Aware of PAC	35%	15%	66%	19%	64%	11%	58%	8%	56%	13%
Member of PAC	27%	N.A.	35%	N.A.	45%	N.A.	48%	N.A.	39%	N.A.
Attended PAC Meeting	33%	N.A.	69%	N.A.	65%	N.A.	61%	N.A.	57%	N.A.
PAC has Influence	83%	N.A.	96%	N.A.	86%	N.A.	96%	N.A.	90%	N.A.
Visited Classroom (Yes)	48%	9%	79%	60%	71%	28%	73%	48%	68%	36%
No. of Classroom Visits										
1 Visit	26%	27%	3%	21%	25%	48%	17%	28%	18%	31%
2 Visits	24%	20%	14%	15%	13%	24%	14%	17%	16%	19%
3 or More Visits	50%	53%	83%	64%	61%	28%	69%	54%	66%	50%
Person Suggesting Visit										
Teacher	33%	60%	15%	31%	29%	59%	30%	27%	27%	44%
Parent	60%	33%	84%	68%	67%	41%	68%	71%	70%	53%
Other	7%	7%	1%	2%	4%	0	3%	2%	4%	3%
Work at School	22%	9%	22%	14%	29%	7%	25%	16%	25%	11%
Satisfied with Child's Progress										
Very satisfied	81%	61%	84%	79%	76%	65%	81%	69%	81%	69%
Fairly satisfied	19%	34%	13%	13%	23%	29%	18%	30%	18%	27%
Not satisfied	1%	5%	3%	9%	1%	7%			1%	5%

*N.A. = Not Applicable

PAC general meetings? If you had a problem about the school, could you get the PAC to do something about it? Of the parents who answered these questions, 40% reported that they were members of the PAC and almost 60% said they had attended a PAC meeting. Also a large number indicated that they felt the PAC has influence over the schools. These figures suggest that, although there is not total parent participation in the PAC, a fair number of parents were active in the organization. Overall, a fourth of the FT parents were members of the PAC and about one-half had attended at least one meeting.

A look across the four communities reveals that responses concerning parent involvement were similar, with the one exception being Community B. Parents in this community appear to have been both less aware of the PAC and less involved in its activities. This finding, along with the finding that Community B parents are less aware that their children are in Follow Through, suggests that communication between the program staff and the parent community may be less successful in Community B than in the other PV communities, at least with the parents interviewed in this study.

Another aspect of the parent involvement investigated in the SRI interview was classroom visits. In all communities more FT parents had visited their children's classroom than had NFT parents. On the average, 68% of the FT parents and 36% of the NFT parents indicated that they had visited the classroom at least once. Furthermore, FT parents tended to visit somewhat more often than NFT parents. Sixty-six percent of the visiting FT parents reported coming three or more times, whereas only 50% of the visiting NFT parents came three or more times during the year. Another interesting result concerning classroom visits was that for the FT group more visits were prompted by other parents (79% compared to 53%).

The interview data also show that higher percentage of FT parents work at school (25% compared to 11%). This outcome is consonant with one of the goals of

Planned Variation, which is to involve parents as pre-professionals (e.g., teaching assistants, learning booth attendants) in the school system.

Parents were also asked about their reaction to their children's progress in school. In general, FT parents appear to be more satisfied with their children's progress. In all communities, more FT than NFT parents reported being "very satisfied."

1969-70 SRI Parent Interview

Considerably less extensive information is available concerning parent responses to the 1969-70 SRI Parent Interview. Four questions of the interview schedule tapped the general feelings of 55 Follow Through parents concerning their own ability to influence school policy. Two additional questions focused on how parents perceive school personnel. Table 5.2 contains data from Community B only on these six questions. The responses reflect a generally positive feeling on the part of parents concerning their own ability to influence school policy. Parents also felt that school personnel were concerned about parent attitudes, and reported they believed that school personnel were aware of parent wishes.

TABLE 5.2

Community B FT Parent Responses to Selected Items on the SRI Parent Interview
Spring, 1970

Statement	Response			
	Strongly Agree	Slightly Agree	Slightly Disagree	Strongly Disagree
If parents wanted something changed about the schools, there would be a good chance of getting it changed.	34%	40%	14%	11%
If the parents disagree with the teacher or the principal, there is nothing parents can do about it.	9%	7%	23%	60%
There is nothing parents can do to change the schools.	5%	5%	16%	72%
Parents have a say about how schools are run.	34%	36%	16%	13%
In this community, people who run the schools really care about what parents think.	60%	26%	12%	2%
People who run the schools really know what the parents want.	31%	36%	20%	13%

Parent-Content Questionnaire

The Parent-Content Questionnaire (PCQ) is an experimental instrument designed to measure perceptions of various groups including parents of parental role in the educational process. It was administered by Laboratory staff to various groups such as parents, teachers, teaching assistants, administrators, etc. in four PV communities in the spring of 1972.

The questionnaire consists of 11 "parent" phrases and 22 "content" phrases which, when combined, yield 242 statements that describe various degrees of parental concern and control in the educational decision-making process. For example, a "parent" phrase--"Parents do make decisions about"--and a "content" phrase--"who teaches their children"--would be combined to form one statement: "Parents do make decisions about who teaches their children." This "parent" phrase would similarly be combined with the remaining 21 "content" phrases, and the process would be repeated over each of the 11 "parent" phrases. The respondent is asked whether he agrees or disagrees with each of the resulting statements. This format makes it possible to compare the responses of various stakeholder groups with one another, and also to compare the responses a given group makes for different statements within the questionnaire.

Extensive analyses of the PCQ data are underway. These will include determining and comparing probabilities of responses made by various groups and applying multi-dimensional scaling techniques to the data. For the present report, however, preliminary analysis of the data examined the responses of parents to three "parent" phrases and four "content" phrases. The three "parent" phrases were "Parents care about," "Parents want to make final decisions about," and "Parents do make final decisions about." The four "content" phrases were: "who teaches their children," "the powers of the Advisory Committee," "what tests their children may be given," and "what parents may do in the classroom."

The percentage of agreement among parents to the four statements in each "parent" phrase category is presented in Table 5.3. Information is presented for Communities B, D and E; no parent responses were obtained in Community C. It should be noted that in Communities D and E the number of parents sampled was quite small. Thus, the possibility that the responses of the persons questioned may not reflect the parent community as a whole should be kept in mind. It can be seen from Table 5.3 that agreement is highest for those statements beginning with "Parents care about." Eighty-three percent of the parents in Community B, 78% of the parents in Community D and 75% of the parents in Community E agreed that parents care about the four "content" phrases examined.

A somewhat smaller percentage of parents in the three communities agreed with the statements beginning with "Parents want to make final decisions about." When parents were asked whether "parents do make the final decision about" the four areas in question, the percentage of agreement dropped considerably. In Community D only 16% agreed with the four statements and in Community B only 25% showed agreement with the statements. In Community E, however, 42% of the parents did agree that parents make the final decisions related to the four areas. Though this is lower than the percentage who felt parents should make the final decisions in these areas, it nevertheless is markedly higher than the other communities' percent of agreement in this category, and may well reflect that parents in Community E are making more of the decisions that affect their children's education.

TABLE 5.3

Responses of Parents to the Spring 1972 Parent-Content Questionnaire Reflecting Degree of Parental Concern and Control Regarding Educational Process

"Parent" phrases *	Community Responses B(n=62)	D(n=16)	E(n=12)	Total (N=90)
"Parents care about..."	83%	78%	75%	81%
"Parents want to make final decisions about..."	58%	64%	67%	61%
"Parents do make final decisions about..."	25%	16%	42%	25%

* The four "content" or completing phrases were: "who teaches their children," "the powers of the Advisory Committee," "what tests their children may be given," and "what parents may do in the classroom."

To summarize, these preliminary data do indicate that most parents in PV communities do care about certain areas related to the education of their child, and to a lesser degree parents want to make final decisions about these areas. Moreover, one fourth of all parents involved in this study felt they influence decisions related to such areas as teacher selection, child testing, in-class parent behavior and PAC operation. The high percentage (42%) of Community E parents who indicated they influence decisions in the four areas examined may reflect a higher level of parent involvement in the decision-making process in that community.

Summary

The involvement of parents in the educational process which serves their children is a major concern of the REP Planned Variation program. The information obtained from parents which was presented in this section indicated that:

(1) Most Follow Through parents were aware of the Follow Through program and felt that it was helpful to their children.

(2) A fourth of the Follow Through parents reported that they were members of the PAC, and about one-half had attended at least one PAC meeting during the year.

(3) Follow Through parents tended to visit the classroom more than non-Follow Through parents, and more Follow Through parents were employed by the school system than were non-Follow Through parents.

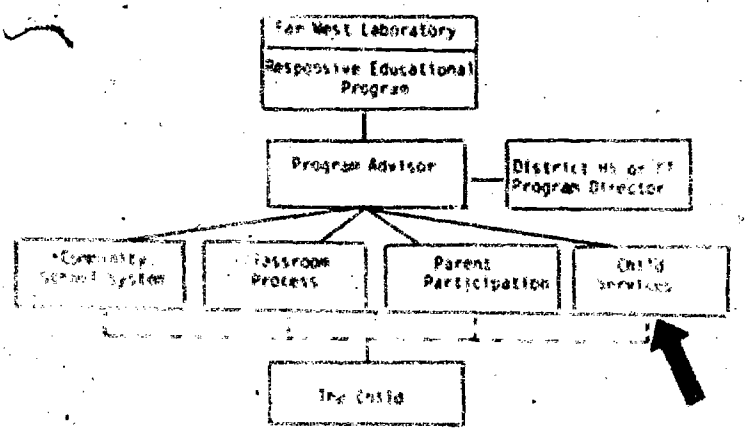
(4) Follow Through parents indicated a high degree of satisfaction with the progress their children were making in school, and in all communities Follow Through parents showed greater satisfaction on this dimension than non-Follow Through parents.

(5) Most parents of children in the REP Planned Variation program expressed concern about issues relating to the education of their children, and many indicated a desire to make decisions about these issues.

(6) About one-fourth of the PV parents who completed the Parent-Content Questionnaire felt that they do influence decisions related to several aspects of the educational process. The community where parents appear to have the most input into the educational decision-making process is Community E. In a separate interview, parents in Community B evidenced a positive feeling concerning the ability of parents to influence school policy.

CHAPTER 6

CHILD SERVICES



Each child in the Planned Variation Program is guaranteed a comprehensive variety of supplementary services. These services range from a well-balanced hot lunch nutritional program to dental, health and psychological services. The REP considers these services critical. In fact, a major portion of the worth of the Head Start PV program must be based on the delivery and adequacy of these services. However, the documentation and evaluation of auxiliary health and nutrition services delivered to PV children are outside the scope of this report. Other organizations have received contracts to evaluate this major component of the Planned Variation program.

Thus far in the report we have been concerned with the delivery system of the REP Planned Variation program and the form of experience which is provided to the child in terms of the school system, the classroom process, parental participation and involvement, and health and nutritional services received by the child. All of these components have a cumulative effect on the child. The next section, which reports child performance data, represents only a small part of this cumulative effect. The other child outcomes that reflect the total impact of the PV program have yet to be documented.

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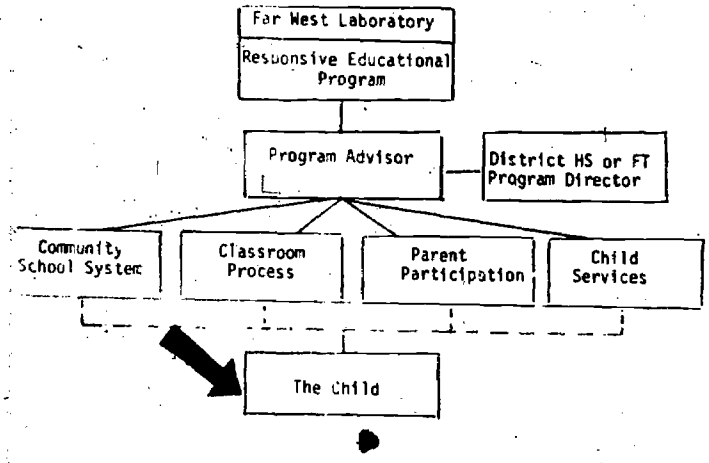
CHAPTER 7

THE CHILD



Objectives for the Child

1. To develop problem-solving and intellectual skills.
2. To promote academic achievement and ensure language competence.
3. To develop a healthy self-concept.
4. To develop a positive attitude toward school and learning.
5. Ultimately to improve a child's life chances.

Data to be Presented

Sources

Community

	B		C		D		E	
	HS	FT	HS	FT	HS	FT	HS	FT
Preschool Inventory (1970-71			X		X			
Wechsler Longitudinal Data (1968-71)		X		X		X		X
Boehm Test of Basic Concepts (1970-71)					X			
Raven's Progressive Matrices (1970-71)					X			X
Language Facility (1971-72)								X
Learning Booth (1971-72)		X		X		X		X
Smiling Faces (1969-70)		X						
Questions about Child's Attitude Toward School on 1969-70 SRI Parent Interview		X						
Attendance Data (1969-70)		X						

The objectives for the child, as stated in this chapter, are long-range goals, which in turn lead to the ultimate goal of improving the life chances of children. We have purposely used dotted lines in our implementation/delivery system diagram to connect to the child. A child's life chances are not assessed by a series of one-to-one, cause-and-effect relationships between what happens in the classroom and what evidence shows that the child has learned. To measure adequately whether even those child objectives (stated on the previous page) have been achieved is an enormous task. The task may even be an impossible one, given the wide scope of the objectives, our limited knowledge of the learning process, and the limited kinds of measurement instruments presently available. To re-emphasize, we feel that the assessment efforts should concentrate on the nature and form of experiences provided to a child.

Presently, we do not claim to have any data that adequately measure long-range child objectives. The data on a variety of standardized tests, which form the bulk of this chapter, merely provide some evidence of how children in the Planned Variation program perform on academic achievement measures. These data are the easiest to obtain, and are probably the least adequate for the task of assessing the progress of children in the PV program.

Recognizing this position and the limitations of standardized achievement tests, the Laboratory had made efforts to use and/or develop instruments that may more appropriately measure our objectives for children. A Target Game (FitzGibbon, 1971) that measures children's level of aspiration about their own abilities is being field tested. Another instrument that relates to self-concept, an attitude scale that assesses a child's perception of his social relations in school (FitzGibbon, 1971), is also being field tested. The Laboratory has also

attempted to identify specific characteristics of problem-solving skills (Barnes, et al., 1971), and is developing a pattern game to assess these characteristics (Yinger, 1971). The Language Facility Test (Dailey, 1968), which purports to provide a measure of oral language facility not based on the child's vocabulary, information, pronunciation, or grammar, was field tested in Community E, and data from the field test are provided in this chapter. Other data on locus of control are also being collected. We feel that our efforts and other investigators' efforts in developing innovative measures and in searching for new ways to assess program objectives will eventually lead to fruitful results.

The remainder of this section reports such information as attendance and attitude indicators along with standardized test scores on PV children in the REP. In most instances, specific sets of data are available for certain communities but not for others. The expense of collecting these data, the fact that data were retrieved from various sources each using a separate testing design, and the policy of collecting test data to answer specific questions in specific communities contributed to this situation. Other test data, such as the Wechsler test scores, are available on all communities.

Community B: Child Attitude Toward School

SRI parent interview data were available for 55 parents of Community B kindergarten FT children. Parents' responses to the question, "How does your child feel about his teacher?" are shown in Table 7.1.

TABLE 7.1

Parents' Report on How Their Children Feel About Their Teacher (1969-70)

	Likes Teacher a Lot	Feels So-So About Teacher	Doesn't Like Teacher
Number	51 (93%)	4 (7%)	0 (0%)

Almost all parents (51 of 55) felt that their children liked their teachers. None of the parents felt that his/her child disliked the teacher. Although these data may reflect parents' willingness to say what they thought was expected, they also suggest that parents perceive their children as responding positively toward their teachers.

Another way to find out about a young child's feelings toward school is to ask the child. An attempt was made by SRI to use an instrument called the Smiling Faces to find out how a child feels about school work and his teacher and how others feel about him. The child was read a statement, and then was presented with three line drawings to record his reaction: a smiling face to reflect agreement with the statement, a face neither smiling nor frowning to reflect a neutral attitude, and a frowning face to reflect disagreement.

The limitations of this instrument are discussed in depth in another report (Rayder et al., 1972). However, data generated from the instrument are probably best used for making general statements concerning child feelings.

Table 7.2 shows how kindergarten children responded to selected questions on the Smiling Faces. All these questions deal with the child's satisfaction with the school "environment" and activities. If the responses the children gave are reliable and the procedure valid, the data collected on the Smiling Faces may be interpreted as reflecting a general attitude toward school on the part of Community B children. The results suggest that a solid majority, averaging about 75% of the children tested, have a favorable attitude toward their school environment. Almost all the children (82%) felt their teacher had a positive feeling toward them and a high, although slightly smaller percentage, felt positive toward their teachers.

TABLE 7.2

Number and Percent of Follow Through Children Responding to Smiling Faces Statement (1969-70)

Statement	Number Scorable Answers	Number and Percent Responding		
		Happy	So-So	Sad
Feeling about coming to school in the morning	141	98 (70%)	24 (17%)	19 (13%)
Feeling about learning new things	144	106 (74%)	22 (15%)	16 (11%)
How do you think boys and girls in class feel about you	110	81 (74%)	29 (26%)	0 (0%)
How teacher feels about you	123	101 (82%)	22 (18%)	0 (0%)
How you feel about your teacher	141	97 (69%)	26 (18%)	18 (13%)
How you feel about other boys and girls in school	143	85 (60%)	31 (22%)	27 (18%)

The same pattern occurs in the attitudes regarding fellow classmates. Seventy-four percent marked "happy" when asked how they thought boys and girls in class felt about them, and 60% marked that they felt "happy" about other boys and girls in school. All in all, these findings probably indicate that the school is a positive and pleasant experience for most Community B Follow Through children.

Community B Absentee Data

Absentee data for Community B were collected from district records during 1969-70 for all six kindergarten PV Follow Through classrooms and for two comparison

classrooms. Table 7.3 summarizes these data.

TABLE 7.3

Community B Absentee Data for Kindergarten PV Follow Through and Comparison Children

Group	Classrooms	Children	Absentees	Average Absences per Child
Follow Through PV	6	177	1795	10
Comparison Groups	2	68	879	12

As shown, the comparison classes recorded about two more days absent per child than the Follow Through PV classes. Though the data are difficult to interpret, they are indicative of a trend that is evident in other Follow Through districts (Rayder, et al., 1971). There are several possible explanations for this phenomenon, as well as some plausible statistical arguments for ignoring such results. The fact remains that PV Follow Through children in Community B missed fewer class days than their non-Follow Through cohorts.

Oral Language Facility - Community E

In April, 1972, data were collected in Community E to assess oral language facility. The REP is based on a language experience approach to language instruction, an approach which uses the language and thinking of the child as the basis for instruction in language skills. In light of the objectives of the REP language program, an effort was made to find an instrument which did not use middle-class English as the criterion for determining successful language performance. The instrument selected was the Language Facility Test (Dailey, 1968) which, according to the author, provides a measure of language facility not based on

the child's vocabulary information, pronunciation, or grammar.

Research was conducted to gain experience with the instrument and to explore three major questions:

1. Is there a difference between FT Planned Variation and a comparison group of children in oral language facility?
2. Is there a difference between Black and white children in oral language facility?
3. Is there a difference between boys and girls in oral language facility?

The test was administered to 32 kindergarten children who participated in the Community E REP (PV children) and 24 children who attended schools in Community E but did not participate in the Planned Variation program (NPV children). Both the PV and NPV groups were evenly divided by sex, and half the children in each group were Black and half were white.

The PV children were selected from high implementation Follow Through REP classrooms; they had previously been in the Head Start REP. The schools from which the NPV children were drawn were judged to be relatively comparable to the PV schools on the basis of location, facilities, and children served. The majority of the NPV children had not had Head Start experience. All the PV children came from families who met the OEO poverty guidelines. Of the 24 NPV children, eight were from families whose income was below poverty guidelines, nine were from families whose income was above these guidelines, and for seven children income information was unavailable.

A three-way analysis of variance (Program X Ethnic Group X Sex) was performed on the data. Table 7.4 depicts the analysis of variance design and indicates the subgroup means and standard deviations. None of the differences between groups was significant. The findings suggest no difference between the PV and NPV group

in terms of language facility. Similarly, children tend to score the same whether they are Black or white and regardless of their sex.

The average total score of the PV and NPV groups (16.9 and 16.9 respectively) was compared to the norms presented in the manual. A score of 16.9 falls at about the 82nd percentile for six-year old children, indicating that the language facility of these children surpasses that of 80% of the children in the norm group.

In summary, PV kindergarten children, who presumably come from the homes with the lowest income in the community, appear to be performing on a comparable level with NPV children, many of whom came from more affluent families. Furthermore, both groups of children appear to be performing favorably when compared to the norming sample.

TABLE 7.4

Analysis of Variance Design with Cell Means and Standard Deviations

	Planned Variation		Non-Planned Variation	
	Boys	Girls	Boys	Girls
Black	n=8 X=16.0 s.d.=2.0	n=8 X=18.6 s.d.=3.6	n=6 X=18.6 s.d.=3.1	n=6 X=16.3 s.d.=4.9
White	n=8 X=15.5 s.d.=2.8	n=8 X=17.4 s.d.=3.9	n=6 X=16.0 s.d.=3.2	n=6 X=16.5 s.d.=3.3

The Preschool Inventory - Communities C and D

The Preschool Inventory (PSI) developed by Bettye Caldwell (1967) is designed to assess a beginning kindergartener's knowledge of ordinal number, size, quantity, color, shape and position, etc. The test has 64 items. The Laboratory administered the test to 26 Head Start children in Community C and 26 Head Start children in Community D at the end of 1970-71 school year. The data were scored in two ways. First, the total correct score was obtained for each child. Next, the items were grouped by content into nine subscales that seemed to relate to specific curriculum objectives: (1) knowledge of self (name, age), 3 items; (2) knowledge of parts of body, 6 items; (3) recognition of action words, 3 items; (4) knowledge of color, position, size, number, 6 items; (5) counting ability, 8 items; (6) skill in comparing objects, 8 items; (7) knowledge of ordinal number, 4 items; (8) ability to make simple geometric figures, 4 items; (9) knowledge of color and shape, 9 items. Thirteen items (items 19-30 and 51) were not included in the subscales because these items were judged to have poor content validity. For example, item 19 asks, "If you were sick, who would you go to?" The answers "doctor" and "nurse" are credited, but the equally likely and acceptable answers "hospital" or "my mother" are not credited. Table 7.5 presents the PSI scores.

TABLE 7.5

Preschool Inventory (PSI) Scores (1970-71)
for Head Start PV children in Communities C and D

	Community C (N=26)			Community D (N=26)		
	Pre Mean (SD)	Post Mean (SD)	Diff.	Pre Mean (SD)	Post Mean (SD)	Diff.
Total (all 64 items) (SD)	51.3 (11.98)	57.0 (8.78)	5.7	36.6 (9.13)	51.8 (7.86)	15.2
Content areas:						
Knowledge of self (3 items)	2.7 (.72)	2.9 (.27)	.2	2.3 (.67)	3.0 (.19)	.7
Parts of body (6 items)	5.2 (1.46)	5.6 (1.25)	.4	3.8 (1.35)	5.1 (1.09)	1.3
Action words (3 items)	2.8 (.50)	3.0 (.19)	.2	2.1 (1.01)	2.3 (.61)	.2
Color, position, size, number (6 items)	5.0 (1.65)	5.1 (1.24)	.1	3.0 (1.77)	4.3 (1.24)	1.3
Counting (8 items)	4.7 (1.94)	6.3 (1.53)	1.6	4.5 (1.34)	5.7 (1.48)	1.2
Comparing objects (8 items)	6.8 (1.35)	6.8 (1.42)	0	5.0 (1.44)	6.7 (.99)	1.7
Ordinal number (4 items)	2.5 (1.45)	2.9 (1.22)	.4	1.8 (1.17)	3.0 (1.30)	1.2
Ability to make simple geometric figures (4 items)	2.9 (1.07)	3.5 (.69)	.6	2.1 (1.05)	3.4 (.93)	1.3
Knowledge of color and shape (9 items)	7.9 (2.04)	8.7 (1.03)	.8	4.6 (2.39)	8.2 (1.28)	3.6

Community D children had lower initial test scores and, as expected, showed greater gains over the school year. On the average, they achieved 15 more correct items at the end of the year than they did at the beginning of the year. Community C children scored higher than Community D children; their pre-test average (51.3) is comparable to the post-test average (51.8) of Community D children. It should be pointed out that children in Community D scored unusually high on the PSI; as a group they made 57 of the total 64 items correct at post-test time.

The PSI manual does not present norm data. The University of Hawaii Head Start Research Center calculated norm data for the PSI based on pre-test scores made by 1575 children in the 1968-69 Head Start National Evaluation sample. Their norm data indicated that for the age group of REP children at pre-test (54 months) the national average score was 25.69 (S.D.=9.2). The REP HS children (Communities C and D combined) scored on an average of about 44 points. This large discrepancy is being examined.

The Boehm Test of Basic Concepts - Community D

The Boehm Test of Basic Concepts (BTBC) (1970) is designed to measure children's mastery of concepts considered necessary for achievement in the beginning years of school: kindergarten and first and second grades. The instrument consists of 50 pictorial items arranged in approximate order of increasing difficulty and divided evenly between two booklets, each containing three sample questions followed by 25 test questions. Booklet 2 is more difficult than Booklet 1. Each item consists of a set of pictures, about which statements are read aloud to the children by the examiner. The statements briefly describe the pictures and instruct the children to mark the one that illustrates the concept being tested.

Basic concepts such as, "below," "different," "middle," "more," "top," etc., are presented in their simple forms; that is, each item presents only one concept

in a straightforward manner. The concepts are grouped into four categories: (1) space (e.g., "top," "through," "away from"); (2) quantity (e.g., "few," "most," "whole," "several"); (3) time ("next to," "middle," "farthest"); (4) miscellaneous, including five concepts that do not belong to the other three categories ("different," "other," "matches," "alike," and "skip").

Twenty-three HS PV children in Community D took the BTBC at the end of the 1970-71 school year. The BTBC was administered somewhat differently from the standard procedure presented in the manual. The standard procedure allows each child to respond to a given item only once. For example, the examiner asks the child, "Mark the box that is away from the table." After the child responds, the examiner continues to the next item. In tne REP test administration, the child was allowed up to two other chances to respond to an item. This administration procedure allowed the child to discover the correct answer himself. The testing experience was consequently transformed into a learning experience instead of being merely a testing experience. However, for the recording of correct answers, only the first response to each item was scored. These scores are presented in Table 7.6.

TABLE 7.6

Community D HS PV Boehm Test of Basic Concepts Scores

Mean	Standard Deviation	Max. Score	Min. Score	Range
29.2	6.6	41	18	23

When test scores made by REP children were compared to the nation, Community D children on the average performed at the 65th percentile. The norm group was based on the performance of 9,737 children. But the modified testing procedure used with the REP children could have influenced their scores.

The Raven's Colored Progressive Matrices - Community D

The Raven's Colored Progressive Matrices are described as a test of observation and clear thinking. It is not a test of general intelligence. The Colored Matrices assess mental development up to the stage "When a person is sufficiently able to reason by analogy and to adopt this way of thinking as a consistent method of inference" (Raven, 1956).

The Colored Matrices are composed of three sets (A, Ab, B), each containing 12 problems arranged in order of difficulty. Each problem consists of a picture with an empty space. The subject is asked to select one of six figures to complete the picture.

The Raven's was administered to 34 Head Start FV children in Community D at the end of the 1970-71 school year. Data on how the children scored are presented in Table 7.7.

TABLE 7.7

Community D Raven's Colored Matrices Data

# Items	Average N=34	Standard Deviation	Max. Score	Min. Score	Range
Set A (12)	6.62	1.48	10	4	6
Set Ab (12)	2.24	1.71	6	0	6
Set B (12)	2.21	1.30	5	0	5
Total (36)	11.06	2.88	15	5	10

The average age of the group of children who took the Raven's Matrices was 53 months. The Raven's manual does not present norm data for this age group. The manual does show that for the age group of 66 months, a total score of 12 for sets A, Ab, and B compares to the 25th percentile of the norming group. To gain more information on the Raven's, and in particular how FT children performed on it, the instrument was administered at the second-grade level in Community E to 34 Follow Through children and to 45 comparison children. Table 7.8 presents the mean scores for Follow Through and comparison children.

TABLE 7.8

Raven's Progressive Matrices Scores Made by Community E Second-Grade Follow Through PV and Comparison Children

	Follow Through PV (N=34)		Comparison (N=45)	
Raven's	Mean	SD	Mean	SD
A	8.9	1.60	9.4	1.45
Ab	7.3	2.37	7.6	2.34
B	5.5	2.02	5.8	2.57
Total	21.70	-	22.80	-

No significant difference was found between the Follow Through and comparison children. Both groups performed quite well and their average scores compared to the 75th percentile norm scores presented in the Raven's manual.

Wechsler Longitudinal Data

The Laboratory collected longitudinal Wechsler (1949) data on selected samples of kindergarten, first- and second-grade children in the four Planned Variation communities. The Wechsler Scales were administered to children at the beginning and the end of the 1968-69 school year, at the beginning and the end of the 1969-70 school year, and at the end of the 1970-71 school year. Longitudinal data exist for

only a small portion of these children. Also, we do not have data to show that these children were in the Head Start REP before their kindergarten experiences, although some of them might have been. This weakens the value of these data for evaluating the Planned Variation program. Not only are longitulinal data inherently difficult to collect, but with the limited funds available to Head Start programs, adequate data can rarely be gathered..

The scale used for kindergarten children was the Wechsler Preschool and Primary Scale of Intelligence (WPPSI), and for first-grade children, the Wechsler Intelligence Scale for Children (WISC).

The two instruments are parallel, the WPPSI being the downward extension of the WISC. Both instruments contain six verbal and six performance subtests. In a standardized administration of the WISC or WPPSI, 10 subtests are given. Raw scores are converted into scaled scores. The sum of the scaled scores on the 10 subtests is used to calculate the child's Intelligence Quotient (I.Q.). Two verbal and two performance subtests were selected from the total test to reduce testing time. The two verbal subtests are the Vocabulary subtest, which requires a child to give word meanings, and the Similarities subtest, which requires a child to explain why two elements belonging to the same category are alike (e.g., the child is asked why a plum and a peach are alike). From the performance section were selected the Picture Completion subtest, which requires a child to identify the missing element in a picture, and the Block Design subtest, which requires the child to arrange colored blocks to match patterns shown to him on cards. These four subtests were chosen since they individually have been shown to correlate highest with the Full Scaled score. The selected four subtests can be considered representative of the general notion of I.Q. and representative of the Wechsler instrument as a whole.

In this report, what is termed the total WPPSI or WISC score is the sum of the four scaled scores made on the Vocabulary, Similarities, Picture Completion, and

Block Design subtests. The highest possible scaled score for each subtest is 20; therefore, with four subtests the highest possible total WPPSI or WISC score is 80. Based on the standardization sample, the general population of children would have an average total WPPSI or WISC scaled score of 40 and an average subtest score of 10.

The children's longitudinal Wechsler scores should not be considered a measure of the cognitive objectives of the REP. These scores indicate how the children in the REP perform on a standardized intelligence test over a period of time. Figures 7.1, 7.2 and 7.3 present children's total WPPSI and/or WISC data over a two-year period. The data are presented in three groups: Group 1 is the 1968-69 kindergarten group; Group 2 is the 1969-70 kindergarten group; and Group 3 is the 1970-71 first-grade group. (Tables B.3, B.4, B.5 in Appendix B present subtest scores.) In general, children in the PV REP tended to score below national norms in kindergarten. At the end of first grade, all kindergarten groups scored at or above national norms. Children who entered the REP as first graders scored close to national norms at entry and maintained that level of scoring after two years in the program.

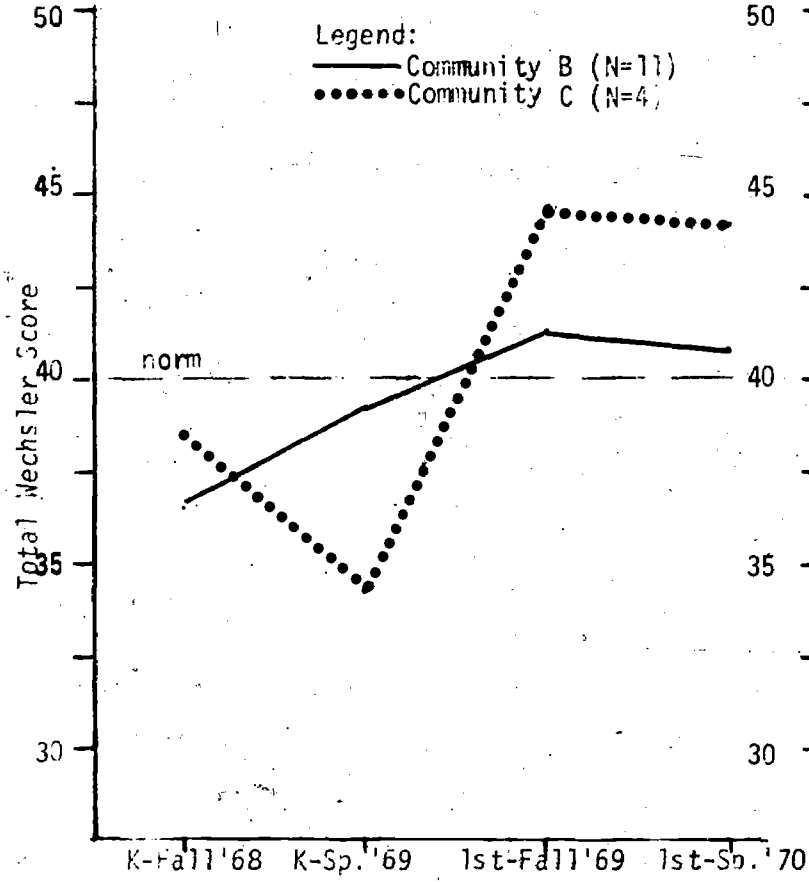


Fig. 7.1. Two year Wechsler data for PV children, K('68) to 1st('70).

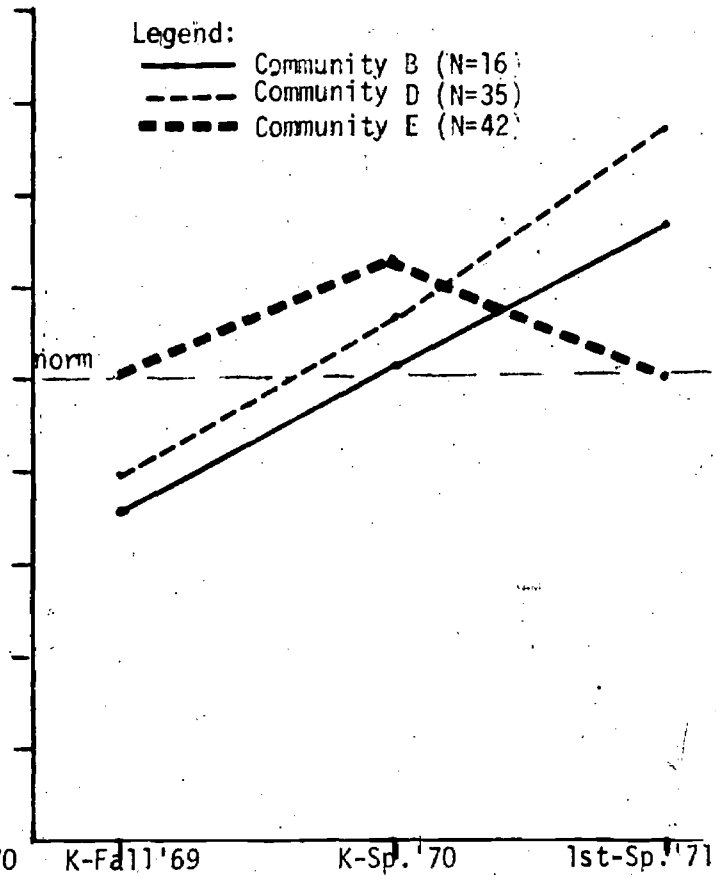


Fig. 7.2. Two year Wechsler data for PV children, K('69) to 1st('71).

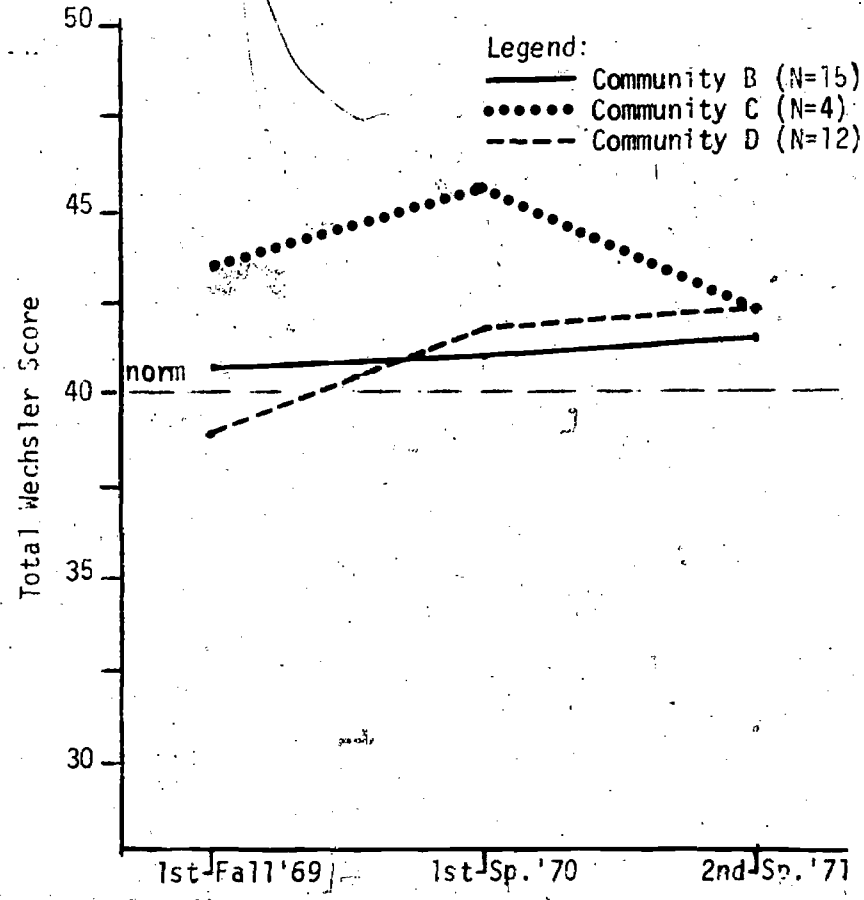
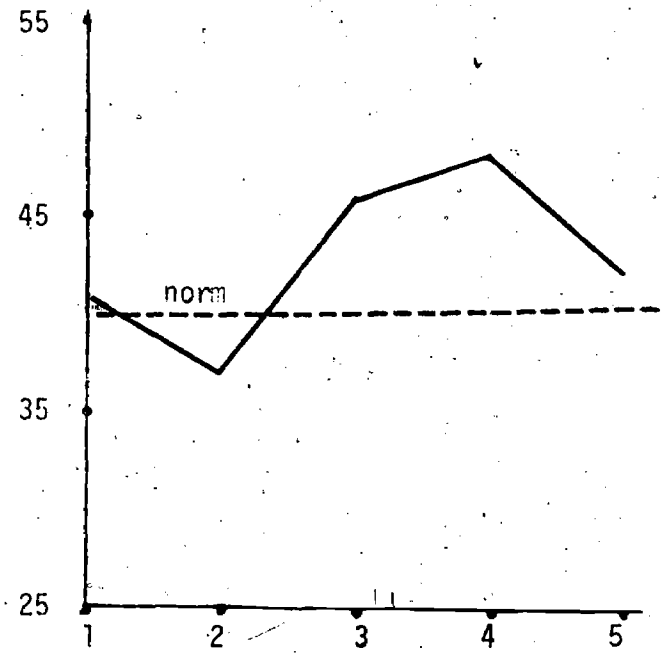


Fig. 7.3. Two year Wechsler data for PV children, 1st('69) to 2nd('71).

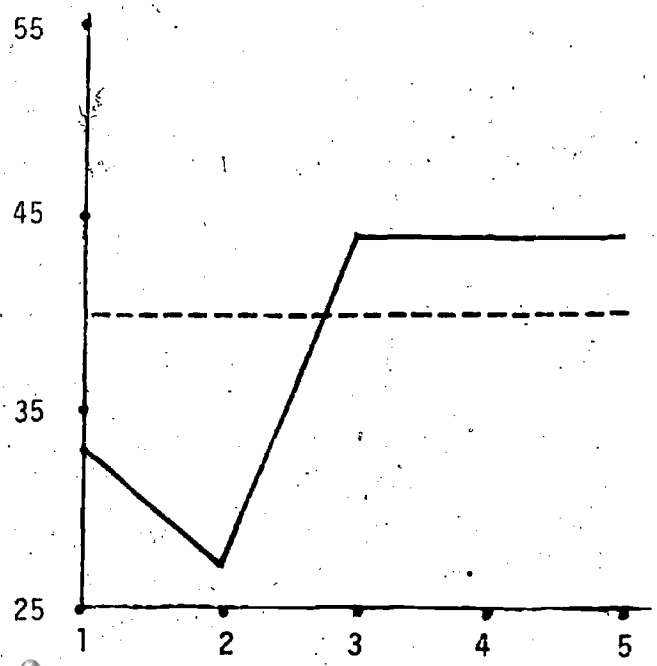
We could follow only eight kindergarten children (two from Community C and six from Community D) over a three-year period. Each child's performance over the three years is presented separately, along with information of the child's family background collected in 1968.

Case (1), Community C. Girl, Black, mother works outside the home.



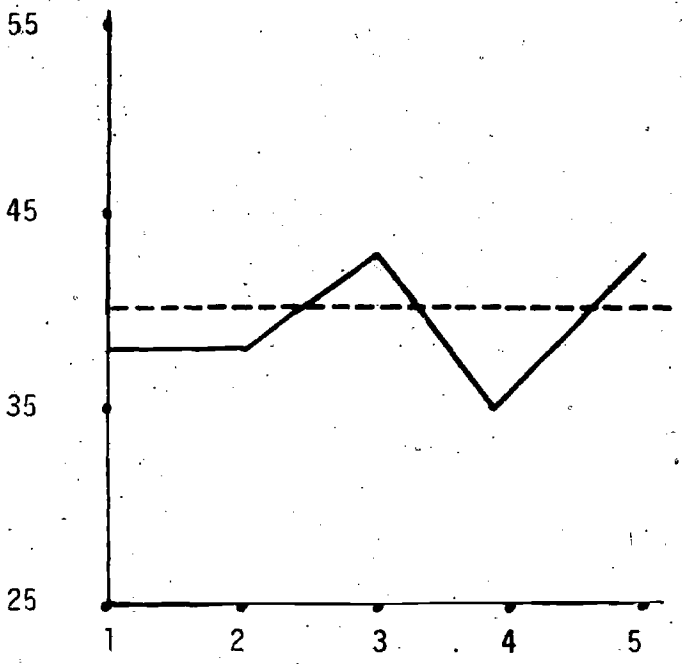
	Time of Test				
Wechsler	1 Fall'68 K	2 Spr.'69 K	3 Fall'69 1st	4 Spr.'70 1st	5 Spr.'71 2nd
Voc.	12	6	13	12	11
Sim.	8	11	12	12	8
P.C.	11	11	10	12	10
B.D.	10	9	11	12	13
Total	41	37	46	48	42

Case (2), Community C. Girl, Black, no information about family.



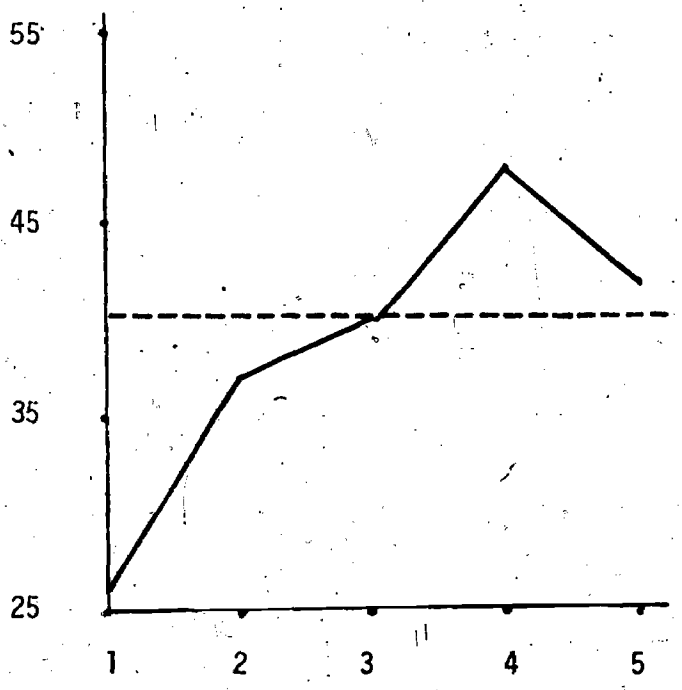
	1	2	3	4	5
Voc.	9	5	10	11	13
Sim.	12	4	14	13	13
P.C.	7	10	8	10	10
B.D.	5	8	12	10	8
Total	33	27	44	44	44

Case (3), Community B. Boy, white. Father works at steel plant, has eight years schooling. Mother works as nurse's aid. Child has seven siblings. Child has hearing trouble.



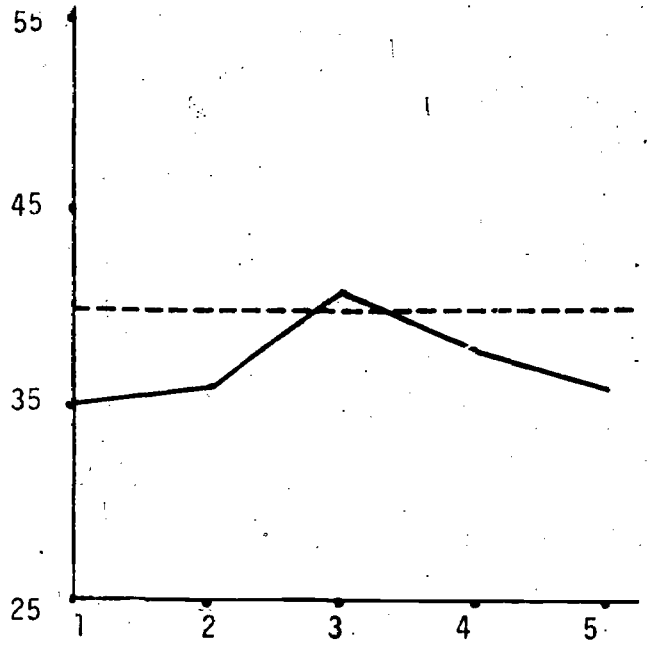
	Time of Test				
	1	2	3	4	5
Wechsler	Fall'68 K	Spr.'69 K	Fall'69 1st	Spr.'70 1st	Spr.'71 2nd
Voc.	7	11	9	6	7
Sim.	10	10	14	5	6
P.C.	9	6	9	12	8
B.D.	12	11	11	12	12
Total	38	38	43	35	43

Case (4), Community B. Girl, white. Mother does office work. Parents are separated. Child lives with mother and has one older sibling.



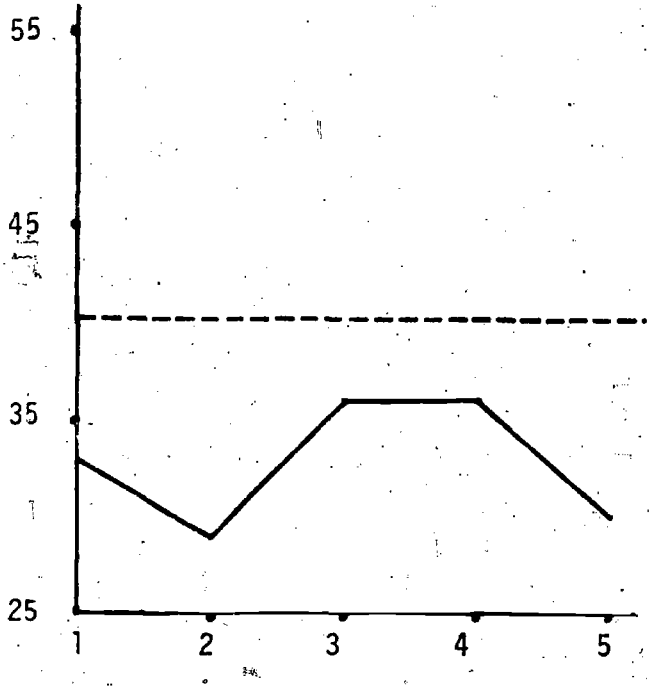
	1	2	3	4	5
Voc.	3	7	6	5	5
Sim.	5	8	8	13	12
P.C.	5	9	10	13	9
B.D.	13	13	16	17	16
Total	26	37	40	48	42

Case (5), Community B. Boy, white. Father works at steel plant. Mother is at home. Both parents have 12 years of schooling. Child has four older siblings.



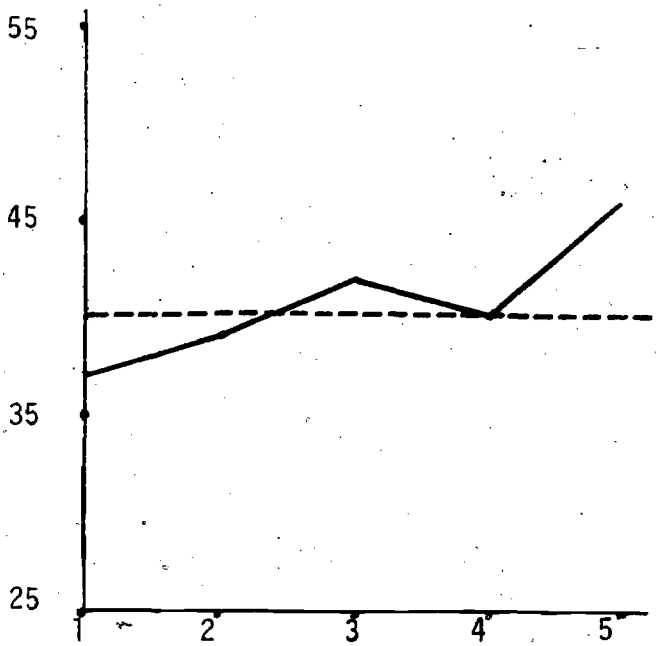
	Time of Test				
Wechsler	1 Fall'68 K	2 Spr.'69 K	3 Fall'69 1st	4 Spr.'70 1st	5 Spr.'7 2nd
Voc.	6	7	10	10	7
Sim.	9	8	12	9	9
P.C.	10	12	8	9	9
B.D.	10	9	11	10	11
Total	35	36	41	38	36

Case (6), Community B. Boy, white. Father works as ironworker. Mother is at home. Both parents have eight years of schooling. Both parents may have drinking problem. Child has speech problem.



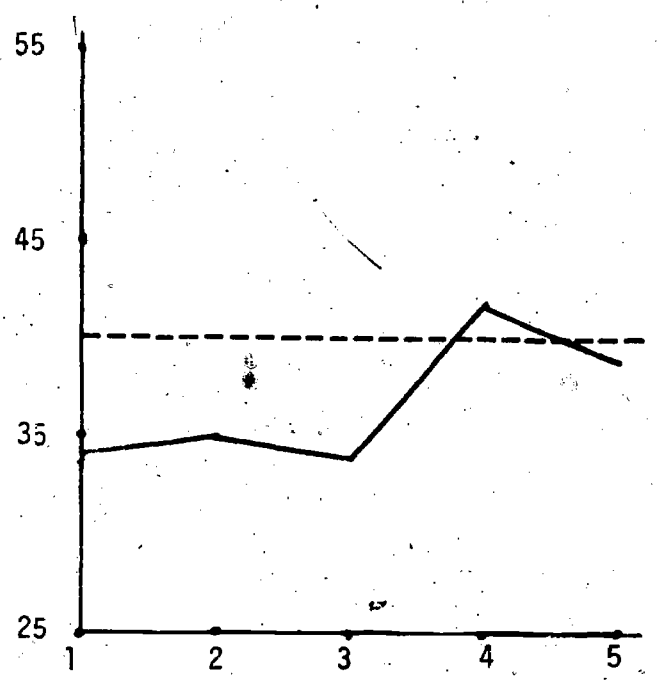
	1	2	3	4	5
Voc.	6	8	6	7	8
Sim.	10	6	13	11	6
P.C.	6	7	5	10	7
B.D.	11	8	12	8	9
Total	33	29	36	36	30

Case (7), Community B. Boy, white. Parents are divorced. Child lives with mother. Siblings: five older and one younger.



Wechsler	1 Fall'68 K	2 Spr.'69 K	Time of Test 3 Fall'69 1st	4 Spr.'70 1st	5 Spr.'71 2nd
Voc.	7	9	11	9	6
Sim.	11	7	8	10	14
P.C.	12	10	12	11	13
B.D.	7	13	11	10	13
Total	37	39	42	40	46

Case (8), Community B. Boy, white. Mother is at home. Mother has 10th-grade education.



	1	2	3	4	5
Voc.	8	7	8	11	9
Sim.	9	9	8	8	8
P.C.	8	10	7	13	11
B.D.	9	9	11	10	11
Total	34	35	34	42	39

The longitudinal Wechsler data for individual children over three school years also indicate that the children's total Wechsler scores do not decline. In six cases, the scores had moved upward; in the remaining two cases, the scores had remained relatively at the same level with upward fluctuations occurring between the initial and final testing periods. The evidence is not conclusive in that the group is so small and in that test-retest effect is not controlled. It may be argued that they fall into the anecdotal category. Even so, they are of value and they do point in the positive direction for our implementation effort.

Summary

Data in this chapter show the performance of HS and FT PV children on a number of unrelated tasks. Most of the tasks were conceptualized or designed to provide some evidence that the child is operating at a certain level concerning certain dimensions, or has developed along certain dimensions over time. The smiling face information, for example, reflects on a child's attitude toward school and his teacher. And the Boehm, Preschool Inventory, and Wechsler data reflect a child's ability to perform standardized "academic-type" tasks.

The evidence of child performance reported in this chapter is extremely positive. Preschool Inventory and Boehm test scores show HS children performing at a level that exceeds national averages. On the Raven's Progressive Matrices, an instrument designed to measure "logical thinking," and on the Dailey Language Facility instrument, designed to measure language production, groups of REP children also exceeded national averages.

Wechsler I.Q. data was also favorable. Groups of children were followed for two and three years from the time they entered REP, and overall, the scores reflect an upward trend. The initial levels were well below national norms, but in two years they had progressed beyond the national average. The data for the three-year follow-up is based on a much-reduced sample, but indications are that the gains of the first two years are maintained and even extended in the third.

These data on standardized achievement and ability tests reflect only a small part of what the child knows or can do. They provide evidence, however, that children who experience the REP over a period of time attain to a level of proficiency equal to or superior to the national norming groups.

The data on school attendance show that REP children attend more days than the comparison group.

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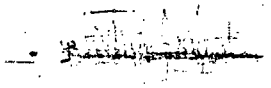
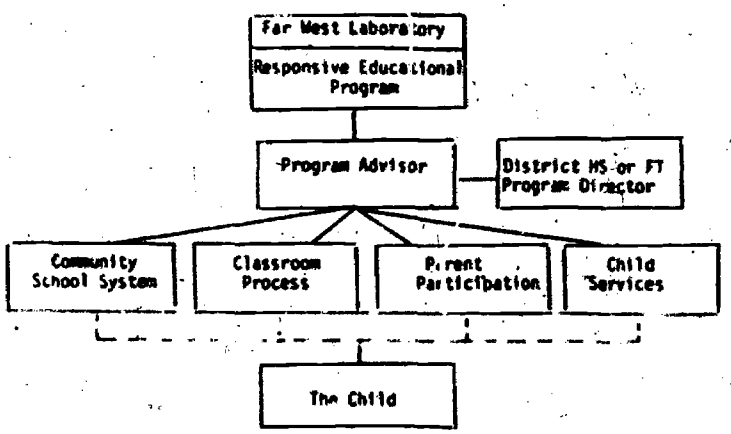


CHAPTER 8

DISCUSSION: THE IMPLEMENTATION COMPONENTS IN PERSPECTIVE

Implementation, Education, and Evaluation

The tasks we have set ourselves in this report were to devise an appropriate evaluation framework as well as to evaluate a particular implementation effort. In Chapter 1 we diagrammed the implementation process in terms of salient process components:



Also in Chapter 1, we took up the task of discussing the components one by one, beginning with the parameters and orientation characterizing the Responsive Education Program. We continued in this fashion, with the Program Advisor in Chapter 2 and on down to the Child in Chapter 7.

We have presented up to now what amounts to a "raw" evaluation. In the process we have introduced several evaluation instruments and techniques developed from our framework-model: ATR, ATA, EFI, etc. We can now discuss the significance of these implementation/outcome data in the context of our evaluation model. But first we need to review some of the unique aspects of our approach.

First, we wish to point out the breadth and scope of our evaluation in terms of the data collected. On the one hand we extend our source of data beyond the child and classroom, to the school system and to the community which provides a context for them both. On the other hand, we report these data from four diverse communities at once.

Secondly, we need to acknowledge some limitations of the data presented. While in some areas the results are straightforward and clear, in some others, particularly in those that fall outside the main focus of this report, the presentation has necessarily been incomplete or merely suggestive. In Chapter 3, for example, we reported information on community characteristics that are logically part of an evaluation plan, but we did not develop the specifics of how these data relate to implementation. For example, the concepts of ATA and ATR could be developed into unidimensional indices so as to incorporate and at the same time give a contextual significance to these data. This is a major project and one we feel is extremely important to do. But it is an issue that deserves its own forum and we are in fact continuing evaluation efforts to define and analyze ATA (Sheldon et al, 1972).

It should be clear that this report differs from other evaluation efforts in its basic goals. First, we do not focus on outcomes without first assessing implementation. Second, we have tried to conceptualize the total delivery-evaluation problem. Rather than concentrate on particular aspects or levels of the evaluation process, we have chosen to forego closure in some cases and spread our energies down the line.

These evaluation strategies are directly relevant to our approach to education. We have set forth our value system in terms of what the educational system should become and do. The focus is not changing the child but changing major process components of the educational system to improve the experiences of the child within the system. Consistent with the underlying goals of the Responsive Program, we

have developed an evaluation framework and derivative assessment techniques and instruments. We have applied these instruments in the context of this particular evaluation and presented some of the "raw" results.

The above points are made to clarify what we expect the applied model to accomplish. In this context we shall review the major implementation components with the purpose of clarifying their significance.

The Program Advisor

We have discussed the Program Advisor's role and indicated how this position is the key link with the Laboratory and the Responsive Program. The PA's effectiveness in disseminating the program through in-service training for teachers and in communicating REP principles and objectives to district personnel is both a reflection on, and condition for, the efficacy of REP materials and staff.

The PA's primary means of implementing the REP in the classroom is conducting workshops. Initially the Laboratory had suggested weekly workshops. However, as the needs of each individual district emerged, the schedule of workshops varied, with frequencies ranging from the recommended once-per-week down to once-per-month. Certain reasons can be offered for this variation in scheduling.

First, as PA's themselves become more knowledgeable in REP procedures, the nature of the in-service workshops probably changed. PA's became more experienced at conducting in-service training. In addition, as more teachers and teaching assistants attended the workshops, their needs changed. Teachers who had been in the program longer and were knowledgeable about REP objectives wanted PA's to spend more time demonstrating in the classroom instead.

Second, teacher turnover rates also affected the nature of PA-conducted training and, consequently, implementation of the program. New teachers are added as the program is extended to higher grades. Also, new teachers replaced those who left the program. Often this replacement occurs in mid-year, thus putting an additional burden on the PAs. This situation meant that in any one school year PA's had to conduct in-service workshops for teachers who represented different levels of competence in REP procedures.

Third, some teachers, especially those in pre-school and kindergarten classes, are more receptive than others to training, and more flexible in assimilating REP procedures. Traditionally, these levels have been more "open" and less structured than primary and elementary grades. Therefore, as the program was implemented in higher grades, both greater teacher resistance and a smaller range of available, field-tested Laboratory materials appropriate for higher grades may have generated additional problems for the PA.

Fourth, the amount of in-service time varies by district because of differing organizational constraints. Planning time is often strictly scheduled, and the amounts allotted may not be consistent with REP recommendations. Teacher associations have negotiated contracts with districts. If the in-service falls under teacher/district contractual agreements the district may determine the contents.

In Community B, teacher in-service training is organized and scheduled by building. PAs are responsible for conducting the in-service work, which may include non-REP teachers and the content of which may be determined by the school's principal. As principals and resource teachers become more involved, the effect on REP program implementation will vary. In Community E, the in-service training remains intact for REP staff. Other teachers may take part, if they so choose, and positive spin-off occurs. Community C conducts in-service training on Saturday morning for the total REP FT staff and provides follow-up individual sessions for one or two teachers based on different classroom needs. Demonstration

teachers have been identified and incorporated into the in-service training. In Community D, which had bi-weekly in-service meetings, the staff now attends individualized in-class workshops. Periodic large-group workshops are held when sufficient numbers of teachers have a common concern.

Clearly, evaluating a program component such as in-service training offered by PA's is a complex task. Their quality as well as quantity is affected by the range of variables above. The quality of the Laboratory's in-service component and our ability to deliver it to the field may be judged by the variety of in-service programs offered in participating districts. Table 8.1 below provides an overview of some other salient variables.

TABLE 8.1

Program Advisor Variables as High/Low/Medium, by Community

COMMUNITY	[1] PA's in-service and other classroom time	[2] Frequency of in-service workshops	[3] Workshops responsive to teacher needs	[4] Relationship to teachers	[5] Force Field Ratings
B	H	L	H	H	H
C	N.A	H	H	H	H
D	M	M	M	H	H
E	M	M	M	H	H

N.A. — information not available
[1] M = 30-50% time in classroom related activities
[2] M = more than monthly, less than weekly
[3] M = 60-80% teachers polled, said workshops responsive to needs
[4] M = 80-90% teachers polled are favorable to PA
[5] M = $0<z>1.0$ for both dimensions; H = $z>1.0$ for at least one.

Table 8.1 summarizes some aspects of PA functioning that have already been discussed in some detail. The wavy line to the right indicates that the list of relevant variables continues on, that the ones listed are merely illustrative of what a comprehensive evaluation might encompass. The cut-off points for H/M/L are arbitrary, but the preponderance of High marks is consistent with any number of indications, already discussed, that the PA component has been notably successful in terms of both degree of implementation achieved, and positive outcomes reported.

The Community and the School System

In studying implementation of the REP, the evaluator should also know a great deal about the community itself. The type and size of community, its problems and ethnic composition, and even the community's history, can be very important considerations. Existing census data have been used to highlight certain economic and social indicators of the four communities. Monies allotted to education, unemployment rates, housing conditions, and living conditions have been discussed as they relate to the notions of attending and responding to a child. We have attempted to present and discuss pre-existing economic conditions that may affect program delivery and implementation. We are certainly aware of the limitations of the data presented in this area and the lack of development it received in our discussion. Some of the community characteristics reported, such as average rental cost, housing units lacking plumbing, and median value of homes, are not especially useful without other information. For example, if we try to present a picture of a given community, its geographic location would directly affect certain economic indicators, such as rent and property costs.

We have also showed the ethnic distribution of people in the four communities, along with other biographical and demographic characteristics of the population. These data are important in providing a background for any study, especially one conducted on a program as comprehensive and complex as Planned Variation. Moreover, these data reflect the extent of the program's generalizability--the ability of a program developed in one community to be implemented in another, possibly very different type of community. For example, Community C's program has been implemented in a large inner-city school system. And although the population in the metropolitan area is 79% white (Table 3.1), almost all the children in the PV program in Community C are Black.

Similarly, the population of Community E, a city with an extremely high unemployment rate, is 80% white, whereas the PV program serves only 50% white children. These statistics, plus the statistics showing the similarity in proportions of ethnic groups as to teachers and the children they serve (Figure 3.1), are presented as examples of other important considerations that can determine the effectiveness of the REP and other programs of education.

These data demonstrate that the children being served by this program are quite different from the general population of children in the community. Furthermore, because of the addition of teaching assistants, the teachers of the children in the classrooms in PV communities more closely reflect, at least in ethnicity, the population of children in the PV classrooms.

We have discussed the notion of language differences and pointed to the Mexican-American children who speak Spanish in the home as a separate group. We feel the language problem is just as much an issue (if not a more important one, because of its relative invisibility) for Black children as it is for Mexican-American children. We feel that Black children and Mexican-American children speak languages

quite dissimilar from the one typically used by middle-class white teachers. Although we view this problem as critical, we have not been able systematically to collect and analyze data on language differences in REP communities.

Furthermore, we are very much aware of the fact that because a teacher has the same ethnic background as the child, this similarity does not guarantee the teacher will have empathy with the child. For example, it is known that a person tends to take on the attributes of the position he aspires to. This subtle change is particularly noticeable among those aspiring to be teachers.

To date, there is a notable scarcity of data that directly reflect on REP objectives for the community and the school system. We have developed a theoretical model to evaluate the institutionalization process (p.49). Some data on initial findings on REP objectives point to positive effects resulting from implementation.

Table 8.2 summarizes some community variables that we have discussed above, and also in Chapter 3, previously. The items actually listed are some background factors which provided the context for the REP to function, and which are therefore appropriate for evaluating the relative success of the implementation effort. Additional background factors, as well as community outcome variables, might be included in a more comprehensive table (Hence the wavy line on the right).

TABLE 8.2

Community Variables as High/Low/Medium, by Community

COMMUNITY	[1] % Local government expenditures on education	[2] ATA Indicators	[3] ATR - Six Factors	[4] ATR - Teacher continuity
B	M	M	M	M
C	M	L	M	M
D	H	M	H	L
E	H	L	H	L

[1] M = 40-50% (national average is 45%).
[2] M = 30-40% of children have father absent.
[3] M = 6-12 total score on six factors (p. 57).
[4] M = 40-60% continuing teachers.

The Classroom Process

The PA has been mentioned as the primary implementation force both in the district at large and at the classroom level. At this level also, the institutionalization process is very complex. To gain more information on the PA and on other classroom influences a special instrument was designed to measure educational forces that affect the teacher. Simple analysis of data collected from Follow Through teachers in REP PV communities showed the Program Advisor was ranked the most important influence on the teacher's behavior.

A more comprehensive force field analysis was designed and conducted to examine the relative positions and directions of 13 forces as they influence a teacher's behavior. Across all four REP Planned Variation communities (see figure 4.5) the Program Advisors (#12) were considered a strong positive influence on the teacher's behavior. The other adult in the classroom (#13) represented a second important positive force. These results reinforce the notion that the delivery system has worked -- the PA is contributing to the educational classroom process in important and positive ways and the teachers and teaching assistants view each other as important positive influences. Principals as a group also contributed positively and to a relatively high extent. The curriculum prescribed by the district and the school's physical facilities were also shown to be influences in the positive direction.

Certain forces remain relatively stable across communities, others take different positions on the force field. For example, teachers in communities C and E felt facilities (#8) did represent an influence, but one they judged to be more negative than positive. Further, the curriculum in Community B was not perceived by teachers, as it was in other communities, as a positive influence. The data across communities are consistent in perceived influence of the central office administration, the testing programs, and the statewide mandates for certification curriculum and grading. In each community, these forces are perceived

quite negatively without much relative influence. The Program Director's influence varies by community. In communities B, D and E, the Program Director has low, relatively positive influence. In community C, however, the influence of the Program Director is high positive.

The forces instrument yields a unique set of important information. More work needs to be done with these data. Analyses by school within community and for different roles using different norming groups are being explored. These future analyses will not only contribute to understanding and assessing effects of implementation but, more importantly, will pinpoint areas of concern for further program development.

One index that might be proposed in this context is simply the degree to which the two dimensions correlate. Thus if some forces are seen as both important and positive, while the negatively-valued forces are seen as correspondingly unimportant, we have what amounts to an essentially optimistic valuation of the situation. The reverse situation, if it ever occurred, would signal, at the very least, some deep disaffection or alienation on the part of the rater.

Table 8.3 summarizes much of the data presented in Chapter 4, including the index just proposed, and labeled Force Field Pattern. Actually correlations for the force-field pattern were highly positive for all four communities, and the Medium rating given Community E is applicable only in this context.

TABLE 8.3

Classroom Process Variables as High/Low/Medium, by Community

COMMUNITY	Classroom implementation, teacher self-report [1]	Teacher-assistant work together--self-report [2]	Parent Participation [3]	Teacher communication to parent [4]	Learning Booth [5]	SRI Observation [6]	Force Field Pattern [7]
B	L	M	H	H	H	H	H
C	M	H	L	H	H	M	M
D	H	H	H	M	H	H	H
E	H	H	H	H	H	M	H

[1] M = 40-60% Implementation reported.
[2] M = 60-80% Work together "extremely well" reported.
[3] M = 40-70% Volunteer parent cooperation in classroom.
[4] M = 60-80% Teachers explain REP to parents
[5] See text & table, pp. 97-99 for valuation.
[6] See graph, p. 94
[7] See above for discussion, pp. 68-71 for data.

Parents

A single parent with insufficient income and poor living and health care facilities cannot effectively attend to a child. Similarly a school system cannot adequately respond to a child unless it is sensitive to the culture and abilities of that child when he enters school. The concepts of Ability to Attend (ATA) and bility to espond (ATR) to children have here been suggested as a replacement for the rather widespread notion of "compensatory education." In this alternative model, the educational evaluator's role changes from focusing on the child and how the school system changes the child's behavior, to focusing on the school system and how educational experiences are changed to respond more to the child and to his/her parents.

Parent participation in the actual teaching/learning process becomes a focus, as does the amount of parent involvement in the decision-making process. SRI data show that all four REP PV communities had more parent participation and involvement than comparison groups of parents examined in these same communities.

Including parents in the classroom provides a closer link between the home and the school. The fact that teaching assistants from the child's community actively participate in the classroom process also contributes to a tighter home-school linkage. Data have been presented to show the change in ethnic disparity between the teaching staff and the children when teaching assistants are included. The relationship of this important outcome of the PV program to the experiences a child undergoes must be explored.

For example, in REP PV communities with large proportions of non-white children, the inclusion of teaching assistants considerably reduces the disparity between the ethnic distribution of the children and the ethnic distribution of the teaching staff. This notion is important only as it relates to the ability of a teaching staff to understand and empathize with children who represent different

life styles and cultures, children who have different learning patterns and strengths. By including in the school process people who closely represent the population of children the school is serving, the potential for awareness of and sensitivity to the particular needs of the children is increased. Further, the experiences a child is likely to receive in school can be made more compatible with his strengths.

Table 8.4 summarizes the Parent variables. The data in the table are sketchy, but they represent some attempt to profile the different communities.

TABLE 8.4

Parent Variables as High/Medium/Low, by Community

COMMUNITY	[1] Parent awareness of program	[2] Parent participation in program	[3] Parent influence in school --SRI	[4] Parent influence in school --PCQ
B	L	L	H	M
C	H	H	N.A.	N.A.
D	H	M	N.A.	L
E	H	M	N.A.	H

N.A. = No data available
[1] M = 50-90% aware of RF?
[2] M = 40-60% of all parents had 3 or more visits to the classroom.
[3] See text, p. 108 for discussion and evaluation
[4] M = 20-40% say parents make final decisions

The Child

The experiences a REP child receives are particularly important in evaluating the worth of the REP program and ultimately in comparing it with other educational models. The form of experience (FOE) is a valid criterion variable that is useful in evaluating education. Operating from this position, the evaluator concentrates his efforts so as to gain valid indicators that will reflect these experiences. Children in the REP experience a learning situation where two full-time adults, one usually selected from their own neighborhood and reflecting their own ethnicity, cooperatively contribute to the teaching/learning process. Also we find that parents are volunteering in the REP PV classroom at a higher rate than in comparison classes, and that classrooms are more responsive as reflected in the classroom data. These data on the process of education represent valid outcome data and weigh heavily in judging program success. Such evidence collected on the REP Planned Variation program is overwhelmingly supportive.

Support for the notion that program implementation has in fact taken place at the classroom level has been found in FOE data collected in HS and FT classrooms by Stanford Research Institute. Children in the REP PV programs have quite different classroom experiences from non-REP PV children. For example, children in "responsive" classrooms initiate more interaction with adults than occurs in non-REP classrooms. Further, the increased child interaction in REP classrooms suggests that these children demonstrate more question-asking behavior. The provisions for free exploration in classrooms and the quality of the materials available to explore produce evidence that children in REP classrooms, to a large extent, seek and gain information by themselves. SRI did not find a similar situation in comparison classes.

Even the adult interaction that a child in the REP experiences is different from that in non-REP classrooms. In REP HS classrooms, of the adult-initiated

interaction, more (66%) occurs with individual children than in comparison classrooms (44%).

In kindergarten and first-grade PV classrooms, independent classroom process data for REP and comparison classes, also collected by SRI, corroborate the HS findings. Ten of the 28 classroom factors generated by the SRI Observation Schedule were judged reflective of REP objectives. When non-REP classes were compared to REP classrooms, a significant difference favoring the Responsive classrooms existed on these factors.

REP classroom experiences differ from those in non-REP classrooms in other ways. In the REP there is significantly more self-learning by a child. In the REP there is significantly more "child-teaching-another-child" behavior. In the REP there is significantly more question-asking by the child. In the REP adults used significantly more "positive" corrective statements in interacting with children and interacted significantly more with children individually or in small groups.

Other evidence of the form of experience a child receives in the REP classrooms is depicted by the Learning Booth procedures. The Learning Booth offers a variety of problem-solving experiences to a child. These range from matching, identifying, and naming letters to discovering ways to solve problems (such as eliminating knowns to arrive at unknowns). The Learning Booth is structured but responsive; the child may choose to participate or not. The data show that the Learning Booths are operating effectively and that children are choosing to participate in this activity that offers well-planned, graduated sets of problem-solving and skill-building experiences. More children in Communities C and D have progressed to the later booth stages than in Communities B or E. Booth Attendants' turnover and equipment destruction by fire have been cited as limiting booth implementation in one district. Data collected over a three- and four-year period (see Appendix C) show the strong progress each community has made in implementing the Learning Booth component.

These data are valid criterion measures! Relating them to child test- core data would pose interesting research questions, but answers are unnecessary in the evaluation of program implementation and in determining ultimate pro ram worth. The facts that parents are volunteering in the REP PV classroom at higher rate than in comparison classes, and that classrooms offer a more re-pon-sive set of experiences as reflected in the classroom data represent valid outcome data for judging program success. Such evidence collected on the REP Planned Variation program is overwhelmingly supportive.

Data collected on children also demonstrate that the child's knowledge base has increased and that the child's in-school experiences are enjoyable. From their responses on the SRI-administered Smiling Faces instrument, children in REP classrooms in Community D seem to enjoy their teacher and their chool. Absentee data collected from that same community show that attendance for REP children is significantly higher than for a comparison group. Child data collected to assess language production was collected in Community E. The study showed that no statistical differences existed between REP children and a comparison grou of children and that both groups scored at the 82nd percentile (using national norms).

Standardized test data also demonstrated the satisfactory achievement levels of REP children. Although standardized test results are not valued as much as instruments measuring self-esteem, problem-solving, and learning-to-learn variables (which are still being developed) they do present a general picture of how groups of children perform on some specific learning tasks.

On all the instruments for which PV child data exist, REP children performed extremely well. Test scores on the PSI increased markedly over one year; as a group, the REP HS children who pretested at a high level in Community C increased an average of 6 points and in Community D increased an average of 15 points. Similarly, average Boehm test results on Community D HS children compared to the 65th percentile of a norming group. Raven's matrix data on second-grade FT children also present strong evidence of achievement. In Community E, in the area of language production no significant difference was found between the PV children and the comparison group on the Boehm. However, both groups performed equivalent to the 75th percentile on national norms for the Boehm Test of Basic Skills.

Wechsler I.Q. data also support the notion of effective intellectual development. Although designed to measure the construct of "native intelligence," Wechsler I.Q. scores increased in all communities for which data were available. In most cases, test scores rose over one- and two-year time periods from below the national average to above it. Individual test scores were plotted for eight children over a three-year period. The fluctuation of these scores was considerable, yet REP scores over the three-year time period either remained at relatively the same level or increased above the national average.

It is essential to reiterate that even though the data are favorable, we do not base substantial claims for the REP on IQ scores and standardized achievement test data. Most of these data reflect short term effects and in very "narrow" areas. Further, the instruments and standardized procedures are "unfair" to a large portion of the children in the program. For child performance to be used as a valid criterion, it must reflect variables such as attitudes and problem solving abilities, and over an extended period of time, as much as 4 to 5 years.

Table 8.5 summarizes the child outcome variables presented in detail earlier. The available data are again not comprenensive. As far as they go, however, we do have strongly suggestive evidence for a high level of imple en-tation and program success.

TABLE 8.5

Child Outcome Variables as High/Low/Medium, by Community

COMMUNITY	Classroom FOE	Wechsler Longitudinal Data, 2-year data	Learning Booth Achievement	Attendance Data	Preschool Inventory	Boehm Test of Basic Concepts	Language Facility
B	H	H	H	H	N.A.	N.A.	N.A.
C	H	H	H	N.A.	H	N.A.	N.A.
D	H	H	H	N.A.	N.A.	H	N.A.
E	H	M	H	N.A.	N.A.	N.A.	H

For specifics on which the H/L/M judgements are based, see appropriate discussion above and in Chapter 7.

Implementation Ratings/Spin-off

Laboratory ratings on the Six Factors were presented as tools for monitoring REP implementation (p. 52). They can also be used as longitudinal evaluative data. In the Spring of 1971, when these ratings were compiled, Community E showed the highest implementation and Community C the lowest. Administrative support, a critical variable for the program's success and for the degree of parent-community involvement, was rated "low" in Communities B and D. However, contradictory evidence from teachers showed communities B and D with the highest percentage of parent volunteers (Table 4.5).

The adequacy of physical facilities and the quality of child services (two factors outside the Laboratory's control) were both rated high only in Community D. Of all four communities, Community D, the reader will recall, had the highest percentage (65.5%) of local government funds expended directly on education. This relationship between program implementation ratings and community budget expenditures is offered provisionally, in view of the sketchiness of the data. However, these types of relationships must be examined in closer detail to answer questions related to the extent, quality, and effects of program implementation. Program spread effects are also important considerations. The fact that the REP was "spun off" into Model Cities programs in Communities B and C and into Title I classrooms in Community D, and became part of a state-wide information package in Community E, can be cited as evidence of program effects and program institutionalization.

When the REP does become visible within a school system, other situations occur that begin as "problems." Non-PV classrooms are differentiated by their lack of child-directed resources. Non-PV teachers, desiring to offer quality education, see the value of instructional assistance in the classroom of the in-service workshops and the support provided by Program Advisors. Initially this results in jealousy and even hostility within the school. Eventually, however,

this hostility resolves itself and the outcome is improved educational opportunities for non-PV children as well. Non-PV teachers are invited to Program Advisor conducted workshops. Materials are shared between PV and Non-PV classrooms. Learning Booth experiences are offered non-PV children and more important efforts are made to increase the educational experiences of all children in the district.

Table 8.6 presents a summary of data on implementation spin-off and spread effects, from Chapter 3. In every instance, there has been influence on other segments of the school system and the community.

TABLE 8.6

Specific Evidence of Spin-off Effects, by Community

COMMUNITY	REP training to other staff in district	REP materials adopted	Adoption in other district classrooms	Model Cities/Title I inclusion	Other spread in community	Other spread in education
B	X		X	X		
C	X			X	X	X
D		X		X	X	
E					X	X

OVERVIEW

At this point we might logically continue by further abstracting and summarizing the data presented in the foregoing tables, perhaps presenting one global table with a single overall rating for each area. But such a scheme would not be practical for several reasons.

- The complexities already blurred in each summary by area would be completely masked in the additional level of abstraction. Up to now we have been able to refer a particular "grade" to specific criteria and/or specific data presented in the text: a global rating would necessarily invoke an overly long chain of reference and judgment.
- The criteria for arriving at a particular item can be constructed in different ways, that would make a global summary too arbitrary. Thus in our evaluation of the Learning Booth item, we chose to report or "grade" it as an outcome variable, and thus it was marked "High" for all communities. If we had viewed it as an implementation variable, Community E would have been assessed as "Low" for the reason that in one program year the facilities were destroyed by fire.
- The ratings are relative to the communities studied and may not apply to a representative sample nationwide. For example, data collected by SRI show parent participation in all four PV communities to be higher than in non-PV comparison samples; but our ratings were on a relative basis within this context, and thus much more conservative, with only Community C receiving a "High."

- The variables are weighted differently in terms of importance to REP. A "High" mark on Wechsler scores is nice, but more important is a "High" mark on, say, a classroom process variable.

These considerations militate against the use of a global summary. They also emphasize our sense of caution with respect to the separate summaries already presented. But these latter were, we feel, still justified because 1) we were able to make direct reference to the data and to justify our assessments with specific criterion statements, and 2) we wished to chart a direction for utilizing the essentially "raw" evaluation presented in earlier chapters.

Yet the major import of these data is not in terms of how successful we may or may not have been in fitting them into a manageable evaluation pattern or framework. The data are ultimately "good" or "bad" depending on their use. Until they become part of a decision-making process, they exist as just "interesting findings." To be useful, to be meaningful, they must become a functioning part of a decision-making system that relates directly to the educational experiences provided to children.

From time to time we have remarked on special limitations of the data, and lamented their lack of comprehensiveness in terms of scope and depth. By the same token, we have declared the uniqueness of our approach to evaluation, and showed that it represents a much-needed advance with respect to exactly those goals of depth and scope. With due consideration for all limitations, general and specific, the data do strongly support these salient conclusions:

- The Planned Variation Program has been successful in changing the ethnic disparity between the adult teachers in a classroom and the children they teach.
- The Program Advisor approach is effective in delivering the REP to communities. There are, however, areas where this delivery system can be improved. These areas relate to the training offered PAs to practice various methods of imparting knowledge and skills to teachers during in-service workshops.
- The REP classroom processes directly reflected in the experiences children receive have been implemented in the classroom.
- The REP has had positive spin-off effects in each of the communities discussed in this report.
- Parents perceive themselves as competent in making educational decisions, but their input in these decisions varies by community.
- The PA and the teaching assistant are perceived as important influences on a teacher's behavior. In all communities, this influence is a positive one.

Of equal importance in this report are the implications and directions for defining future evaluation:

- The implications for evaluation models arising from the Ability to Attend (ATA) and Ability to Respond (ATR) concepts are important and should receive major attention in future research and evaluation studies.
- The criterion issues raised and directions implied by concentration on the form of experience (FOE) for providing a cluster of criterion variables are valid and must be explored.
- The need for more comprehensive community case studies using a variety of data collected from various sources is clear. Three community case studies reflecting this effort are available from the Laboratory.

- It is important to examine the institutionalization process and to determine levels of implementation for various program components.
- Further efforts to develop instruments to measure implementation are needed. Initial efforts, as reported in this paper, to document such areas as the influences on teachers, how parents are perceived in a community, and factors that relate to implementation have proved productive.
- Other areas not addressed in this paper must also be explored. It is not only important to look at the longitudinal development of children during their five years in a HS/FT PV Program, but, even more so, to follow the child so as to examine development in future elementary and secondary grades.
- Parent impact on the educational community must also be examined in greater depth.
- Efforts should be made to determine if parents are involved directly in the teaching/learning classroom process and if decisions parents make in PAC meetings are reflected in educational program changes.
- Other studies on how various educational personnel, such as Program Advisors, principals, parent coordinators, etc., spend their time and perform their responsibilities will reflect the priorities a community sets for the educational system.

In conclusion, the data on program effects contained in this study are extremely positive but, in one sense, unimportant. The writers intended to set a tone for identification of evaluation areas and to generate ideas and methods for evaluating complex multi-dimensional curriculum studies. Considerable work will be necessary to extend and clarify such concepts as the ability to attend, the ability to respond, and the form of experience. However, the REP is committed to these directions and will pursue them in an effort to explain the relationships between the environment and the learner -- or to discover what experiences contribute to increasing a child's life chances.

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CHAPTER 9

SUMMARY AND PERSPECTIVE

Our purpose stated at the outset was to evaluate the implementation effort for REP and to outline a framework for such an evaluation, consistent with the philosophy of the program itself.

We have presented a variety of intensive efforts in pursuit of both these major goals. But the main value of the report lies in the charting of new directions for future evaluation projects. The complexity of the problems involved, and the relative paucity of resources available in this particular context precluded a detailed or comprehensive assessment of program success. The fact that no definitive statements are offered on this score is not to suggest that such a goal is not worthwhile: quite the contrary is intended. But the prior formulation of an assessment framework as well as the preliminary assessment offered here are necessary first steps toward such a comprehensive effort.

With regard to the implementation process itself, the general sense of this report is that it was successful. But this is not an either/or question, nor one that can be answered in terms of how much alone. It was necessary to look at particular implementation features in particular communities. Our analyses have been focused on implications for future implementation efforts rather than statements about relative success.

With regard to the framework for assessment, we have outlined a model that is consistent both with the underlying philosophy of REP and with the preliminary character of this project. In addition, we have described several evaluation instruments of our own devising to satisfy the need for a broader base of evaluation. These have proved very useful in this context.

This assessment effort cannot be considered as a work to itself. It must be viewed in relation to the ongoing work of the Laboratory and as a preliminary to improved efforts using the new model outlined here.

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APPENDIX A

DATA SOURCES

The chart on the following page summarizes the type of data collected, source of the measurement instrument utilized, year gathered, and community from which data were obtained. The data summarized in the report represent information gathered by two major sources, the Far West Laboratory and the Stanford Research Institute. Data were also retrieved from census reports. It should be noted that several of the measures used in the data collection are commercially available standardized instruments whose reliability and validity are available in published manuals. The majority of the remaining instruments were devised as experimental devices for evaluating various aspects of Head Start and Follow Through programs. Although the reliability and validity data of these measures is still under study, the instruments provide important information on program implementation.

PLANNED VARIATION DATA CHART

Information	Source	Collected By	Date	HS/FT	Data on Community: B	C	D	E
Institutionalization Interview Questionnaire	Far West Lab. (FWL) developed	FWL	1970	FT	Yes	Yes	Yes	Yes
Implementation Factors Rating	Stanford Research Institute (SRI) developed	SRI-FWL	1971-72	HS	Yes	Yes	Yes	Yes
District Population Characteristics and Economic Indicators	Bureau of the Census	FWL	1971	District	Yes	Yes	Yes	Yes
Program Advisor Use of Time Chart	FWL	FWL	1971---- 1971-72--	-FT -HS	Yes	No	Yes	No
Classroom Observation Instrument	Stanford Research Institute (SRI) developed	SRI	1971-72	HS-FT	Yes	No	No	No
Teacher/Teaching Assistant Questionnaire Survey	FWL	FWL	1970-71	FT	Yes	Yes	Yes	Yes
Purdue Teacher Opinionaire	Commercially available	FWL	1971-72	FT	Yes	No	No	No
Educational Forces Inventory	FWL	FWL	1971-72	FT	Yes	Yes	Yes	Yes
Classroom Rating Form	FWL	FWL	1970-71	HS	Yes	Yes	Yes	Yes
Child demographic Form	FWL	FWL	1970-71	HS-FT	Yes	Yes	Yes	Yes
Wechsler Intelligence Scale for Children (WISC) Wechsler Preschool & Primary Scale of Intelligence (WISC)	Commercially available	FWL	1969-70-71	FT	Yes	Yes	Yes	Yes
Raven's Progressive Colored Matrices, Sets A, Ab, B	Commercially available	FWL	1970-71-- 1971-72--	-HS -FT	No No	No No	Yes No	No Yes
[illegible]ell's Preschool Inventory	Commercially available	FWL	1970-71	HS	No	Yes	Yes	No

PLANNED VARIATION DATA CHART (CON'T)

Information	Source	Collected By	Date	HS/FT	Data on Community: B	C	D	E
Boehm's Test of Basic Concepts	Commercially available	FWL	1970-71	HS	No	No	Yes	No
Dailey Language Facility Test	Commercially available	FWL	1971-72	FT	No	No	No	Yes
Learning Booth Performance Record Form	FWL	FWL	1969-72	FT	Yes	Yes	Yes	Yes
Parent Interview	SRI	SRI	1971-72	FT	Yes	Yes	Yes	Yes
Parent Content Questionnaire	FWL	FWL	1971-72	FT	Yes	Yes	Yes	Yes

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APPENDIX B

TABLE B.1

Teacher and Teaching Assistant Responses to Working Conditions
Question: How do you feel about working conditions in your classroom?

	Community	SATISFIED		MIXED FEELINGS		DISSATISFIED	
		Teacher	Teaching Assistant	Teacher	Teaching Assistant	Teacher	Teaching Assistant
Equipment	B	15	22	4	3	3	1
	C	19	8	4	3	0	1
	D	14	16	1	0	1	0
	E	10	16	5	3	0	0
		58	62	14	9	4	2
Supplies	B	15	20	4	5	2	0
	C	11	14	8	1	3	3
	D	12	16	3	0	2	0
	E	9	11	4	2	2	1
		47	61	19	8	7	4
Classroom Space	B	9	13	6	2	6	10
	C	13	11	8	6	2	1
	D	12	12	3	1	0	3
	E	9	9	2	4	5	1
		43	45	19	13	13	15
Class Schedule	B	14	18	6	5	1	2
	C	16	16	6	6	1	0
	D	13	14	2	2	0	0
	E	12	12	3	1	0	0
		55	60	17	14	2	3
Salary	B	20	6	1	12	0	6
	C	17	12	4	5	2	8
	D	6	4	5	3	4	7
	E	14	8	0	4	1	1
		57	30	10	26	7	18
Planning Time	B	9	13	6	4	6	8
	C	13	15	5	3	5	1
	D	4	12	4	2	7	1
	E	7	8	3	2	5	4
		33	48	18	11	23	14
Community Total	B	82 (65%)	92 (61%)	27 (21%)	31(21%)	17 (13%)	27(18%)
	C	89 (65%)	76 (75%)	35 (26%)	24(20%)	13 (9%)	6(6%)
	D	61 (68%)	74 (77%)	18 (20%)	10(11%)	11 (12%)	11 (12%)
	E	61 (67%)	64 (76%)	17 (19%)	13(15%)	13 (14%)	8(10%)
Grand Total (All Communities)		293 (67%)	306 (70%)	97 (22%)	78(20%)	54 (12%)	52(12%)

TABLE B.2

Teacher and Teacher Assistant Responses to Classroom Teaching Methods

Question: Indicate the extent to which you use [these methods] in your classroom.

		HIGH		MEDIUM		LOW	
Community		Teacher	Teaching Assistant	Teacher	Teaching Assistant	Teacher	Teaching Assistant
Self-pacing	B	10	9	10	11	1	5
	C	9	10	12	5	2	3
	D	10	6	4	4	0	1
	E	11	14	5	3	0	0
		40	40	31	23	3	9
Free Exploration	B	9	12	12	11	1	2
	C	14	7	9	10	0	1
	D	9	9	5	7	1	0
	E	11	11	4	3	0	1
		42	39	30	31	2	4
Discovery Learning	B	6	10	13	12	2	4
	C	8	6	14	11	1	0
	D	7	12	7	4	1	0
	E	8	9	7	5	1	1
		29	37	41	32	5	5
Spontaneous Activities	B	8	6	13	13	0	4
	C	13	8	9	5	2	2
	D	8	5	6	10	1	1
	E	9	6	6	8	0	0
		38	25	34	36	3	8
Self-Rewarding	B	3	6	16	16	2	3
	C	8	9	12	5	0	2
	D	11	10	4	5	0	1
	E	8	6	6	6	1	2
		30	31	38	32	3	8
Learning Centers	B	9	15	11	11	0	0
	C	18	9	4	8	0	1
	D	12	14	2	2	1	0
	E	11	12	5	1	0	1
		50	50	22	22	1	2
Freedom of Choice	B	9	8	11	14	1	3
	C	13	10	10	6	0	2
	D	13	11	1	4	1	1
	E	12	11	4	2	0	1
		47	40	26	26	2	7
Language Experience	B	7	12	11	10	2	2
	C	13	6	8	8	2	2
	D	6	9	7	6	2	1
	E	9	10	7	5	0	0
		36	37	33	29	6	5
Math Workshop	B	9	10	5	11	10	2
	C	3	5	7	7	11	4
	D	10	10	3	5	2	1
	E	6	7	9	7	1	1
		28	32	24	30	24	8
Community Total	B	70 (37)	88 (40)	102 (53)	109 (49)	19 (10)	25(11)
	C	99 (49)	70 (46)	85 (42)	65 (42)	18 (9)	18(12)
	D	85 (64)	89 (63)	39 (29)	47 (33)	9 (7)	6(4)
	E	85 (60)	84 (64)	53 (38)	40 (31)	3 (2)	7(5)
Grand Total (All Communities)		340 (51)	331 (51)	279 (42)	261 (40)	49 (7)	56(9)

TABLE B.3

Longitudinal Wechsler Scores, Kindergarten
Fall 68 to First Grade Spring 1970

Community	Wechsler Scale	Kindergarten (Fall 68)		Kindergarten (Sp. 69)		First Grade (Fall 69)		First Grade (Sp. 70)	
		$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD
B (N=11)	Vocabulary	7.2	2.32	8.9	2.51	8.5	2.02	7.9	2.07
	Similarities	8.7	2.41	8.5	2.21	9.7	2.37	9.5	2.84
	Picture Completion	9.5	2.81	9.9	2.70	10.7	3.10	12.0	2.00
	Block Design	11.1	2.88	11.8	2.40	12.4	1.63	11.4	2.58
	Total	36.5	6.76	39.1	7.63	41.3	3.96	40.8	4.36
C (N=4)	Vocabulary	11.0	1.83	7.6	2.75	11.5	1.29	11.8	0.96
	Similarities	11.5	2.89	9.3	3.59	13.3	1.50	12.3	0.96
	Picture Completion	8.5	1.92	9.5	1.73	8.8	0.96	10.3	1.71
	Block Design	7.5	2.08	8.0	1.41	11.0	1.41	9.8	1.71
	Total	38.5	3.79	34.4	5.07	44.6	1.29	44.2	3.27

TABLE B.4

Longitudinal Wechsler Scores, Kindergarten
Fall 69 to First Grade Spring 1971

Community	Wechsler Scale	Kindergarten (Fall 69)		Kindergarten (Sp. 70)		First Grade (Sp. 71)	
		$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD
B (N=16)	Vocabulary	8.6	1.7	8.6	2.1	9.8	3.0
	Similarities	9.1	2.2	11.1	3.0	10.1	3.0
	Picture Completion	9.1	2.6	10.1	1.8	11.7	3.4
	Block Design	9.7	2.3	10.7	2.2	12.5	2.4
	Total	36.4	5.7	40.4	6.5	44.1	7.8
D (N=35)	Vocabulary	7.4	2.2	8.1	1.6	11.0	2.2
	Similarities	10.2	2.6	11.8	1.7	13.6	3.7
	Picture Completion	9.3	2.4	10.2	1.9	10.9	2.6
	Block Design	10.5	3.0	11.5	2.6	11.2	3.0
	Total	37.4	7.5	41.6	4.6	46.9	4.5
E (N=42)	Vocabulary	9.1	3.5	8.8	2.8	7.6	4.5
	Similarities	10.3	3.7	11.0	2.9	10.8	3.1
	Picture Completion	9.9	2.5	11.7	3.2	9.8	2.7
	Block Design	10.3	2.8	11.4	2.7	11.8	3.3
	Total	40.0	10.0	43.1	8.8	40.0	9.1

TABLE B.5

Longitudinal Wechsler Scores, First Grade
Fall 69 to Second Grade Spring 71

Community	Wechsler Scale	First Grade (Fall 69)		First Grade (Sp. 70)		Second Grade (Sp. 71)	
		$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD
B (N=15)	Vocabulary	9.2	2.2	8.7	2.3	8.4	2.6
	Similarities	9.7	2.6	8.8	2.9	9.3	2.3
	Picture Completion	9.8	2.9	11.6	2.1	11.6	2.9
	Block Design	12.0	1.9	11.9	2.5	12.2	2.5
	Total	40.6	6.2	41.0	6.2	41.5	6.7
C (N=4)	Vocabulary	11.0	1.4	11.0	1.4	11.5	1.3
	Similarities	12.3	2.4	12.0	1.4	11.0	2.2
	Picture Completion	9.5	2.6	10.0	3.6	9.3	1.0
	Block Design	10.5	1.7	12.5	2.0	10.5	2.4
	Total	43.3	6.5	45.5	3.0	42.3	1.3
D (N=12)	Vocabulary	8.8	2.7	8.8	1.9	10.7	2.5
	Similarities	9.8	2.7	11.0	2.8	12.5	3.7
	Picture Completion	10.0	3.0	10.0	3.0	10.0	2.9
	Block Design	10.4	1.8	12.0	1.9	9.1	2.3
	Total	38.9	5.8	41.8	6.5	42.3	8.9

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APPENDIX C

LEARNING BOOTH ACTIVITIES

The entire sequence of the Learning Booth activities is divided into five phases. A brief description of the activities of each phase is as follows:

Phase I - Free Exploration - the child plays with the typewriter and the attendant explains to him that he is doing. When the child strikes letters or numerals, the attendant names them.

Phase II - Search and Match

Step 1 - the child matches letters on the typewriter keyboard with letters of a magnetic chart which is also in the form of a typewriter keyboard;

Step 2 - the child matches keyboard letters and numerals.

Phase III - Discrimination

Step 1 - the attendant names one letter of a card which is printed with two or more letters, the child decides which letter to type;

Step 2 - the child learns to match capital and small forms of letters;

Step 3 - the child discovers how to type capital and small forms of letters;

Step 4 - the child sees a small letter but types the corresponding capital letter on the typewriter.

Phase IV - Typing Original Words

Step 1 - the child types his own words;

Step 2 - the child types his own stories.

Phase V - Classroom Related Activities

Step 1 - presented with a card which has several words and a picture (Durrell-Murphy card), the child types the word that best describes the picture;

Step 2 - the child types a note to a friend;

Step 3 - the child types the word that is covered on a phonogram card, for example; for the following phonogram card,

map	rap	tap
mug	rug	tug
	ran	tan

the child should type the word "man";

Step 4 - the child types words or sentences from a book.

NOTES ON LEARNING BOOTH IMPLEMENTATION IN THE FOUR PLANNED VARIATION COMMUNITIES MADE BY THE LABORATORY LEARNING BOOTH TRAINER

Community B

The Learning Booth program is fairly good in Community B. The Program Advisors are knowledgeable about the booth and very supportive of the program.

The booth attendants and teacher assistants work half-time at each job. This arrangement works out easily since there are two kindergarten sessions, morning and afternoon, so that a person might work as a booth attendant in the morning and as a teaching assistant in the afternoon. I recommend the training of assistants in both areas of work. The diversity of work and extra training can be very positive - the work does not get boring and the two jobs complement each other.

Learning Booth achievement decreased last year in comparison to 1970-71. Table C.1 shows achievement in Community B since it implemented the Follow Through program.

Table C.1

Percent of Community B Kindergarten Children who Were Performing in Various Phases at the End of the School Year

Year	N	Phases I	II	III (1-2)	III (3-4)	IV	V
1968-69	65	3	14	37	14	32	*
1969-70	206	5	10	26	25	23	10
1970-71	186	1	2	12	21	32	31
1971-72	80		4	17	34	28	17

* Phase V not developed

A possible explanation for lower achievement is the turnover of Booth Attendants. Half of the Booth Attendants were new to the program during the 1971-72 school year. The Senior Booth Attendant, who has worked with the Learning Booth in Follow Through for several years, was also new in her job as the trainer of other attendants.

The Community B booth program has always been very independent of the Laboratory. Booth problems have been handled by the Senior Booth Attendant and Follow Through staff.

Community C

Community C has always had an excellent group of Booth Attendants. I would say they are the best group we have in Follow Through. They enjoy the work and, as a result, there has been very little job turnover. They work well individually and are very supportive of each other. If a new Booth Attendant needed help, she would work with one of the experienced Booth Attendants for additional training.

Booth achievement for the past four years is as follows:

Tabel C.2 -

Percent of Community C Kindergarten Children Who Were Performing in Various Phases at the End of the School Year

Year	N	Phases I	II	III (1-2)	III (3-4)	IV	V
1968-69	164	21	37	13	18	6	*
1969-70	176	6		40	21	19	7
1970-71	96		2	8	19	38	33
1971-72	80			1	15	38	46

* Phase V not developed

During the 1971-72 school year, data were not received from one school. The typewriter had been stolen and funds were not available to replace it.

Administrative support for the Learning Booth has been positive. The Follow Through project administrator has been most helpful. A problem did exist in the school where the Senior Booth Attendant worked. The principal did not want the Senior Booth Attendant to leave the school to train other Booth Attendants. Fortunately, very little training had to be done since four of the five booth attendants had worked in the program for several years. All Learning Booth problems have been resolved without Laboratory help.

In several kindergartens in Community C teachers were using information from the Learning Booth as a means of assessing children's needs. In most cases there was excellent communication between booth Attendants and teachers.

Community D

Community D has a good Learning Booth program. The Senior Booth Attendant has been with the program since 1968 and seems very competent in her work. Of eight Booth Attendants, only two were new to the program last year.

Learning Booth achievement for the past years has been as follows:

Table C.3

Percent of Community D Kindergarten Children Who Were Performing in Various Phases at the End of the School Year

Year	N	Phases					
		I	II	III (1-2)	III (3-4)	IV	V
1968-69	197	7	15	32	5	42	*
1969-70	85	5	7	34	20	15	19
1970-71	85		5	20	12	40	24
1971-72	116	7	2	6	5	13	68

* Phase V not developed

Perhaps the main reason for the significant rise in 1971-72 achievement is the low turnoyer rate of Booth Attendants.

Both teaching assistants and booth attendants work half-time in the Learning Booth. The other half of their time is spent in the classrooms. This works very well in Community D.

The Follow Through staff has always been supportive of the Learning Booth. In fact, in 1969-70 electric typewriters were ordered for first-grade classes. These machines were put in a separate learning center for children to use individually.

Community E

This Learning Booth Program has excellent potential that has not been fully developed. During the 1970-71 year, the Senior Booth Attendant left her job early in the year. The attendants never received adequate follow-up training. The Senior Booth Attendant during the 1971-72 year does excellent work but she was unable to build the competencies and the confidence of good, experienced Booth Attendants. An additional problem in 1972 was the destruction of a Follow Through school by a fire. Though Learning Booth materials were re-ordered, the lapse in time affected the achievement in three Follow Through classes.

Community E has been a Follow Through district since 1969. The achievements for the three years has been:

Table C.4

Percent of Community E Kindergarten Children Who Were Performing in Various Phases at the End of the School Year

Year	N	Phases					
		I	II	III (1-2)	III (3-4)	IV	V
1969-70	154	3	24	36	19	17	1
1970-71	134	1	7	33	22	29	7
1971-72	96		8	21	26	39	6

The Follow Through administration could not be more supportive of the program. One Program Advisor has been actively involved in all Laboratory

Booth training. She and the Senior Booth Attendant are totally capable of solving all Booth problems. During the 1971-72 school year, I spent three days in Community E. During this time, the Senior Booth Attendant and I ran workshops for all Follow Through teachers, familiarizing them with Learning Booth procedures, goals, and games. The interest of the teachers was very high. As a result, some teachers expressed interest in further training so they could take children into the Booth.

APPENDIX D

EDUCATIONAL FORCES INVENTORY

SIDE ONE

Many factors, other than children's needs, influence a teacher while that teacher works to implement a curriculum in the classroom. This instrument was developed to understand more about the nature of such influences. Think carefully about your responses. A thoughtful response on your part will contribute most to our understanding in this area.

IMPORTANT: We are concerned with your honest responses and have asked you to provide your name. All information collected on this instrument will be kept confidential and no individual person will be identified. However, if by including your name you will feel uncomfortable about the information you provide, please do not include your name.

Please fill in the information below, then turn the sheet over and complete the three tasks.

Thank you for your help.

Name (Please print) _____
Last First

School _____

District _____

	Yes	No	
___Your age (to nearest year)	☐	☐	Are you in Follow Through?
___Sex			___For how many years?
___Are you a parent?	☐	☐	Are you in Head Start?
___If yes, indicate the number of children you have.			___For how many years?
___Grade you are now teaching			Are you a (check one):
___Number of years teaching experience			Teacher
___Number of years teaching in the district			Teaching Assistant
			Other Staff (indicate)

Task [illegible] factors [illegible] influence teaching behavior are [illegible] below. First, read through the list, then rank these factors from 1 [illegible] 13. [illegible] the factor that [illegible] the strongest influence (either positive or negative) over your [illegible] teaching [illegible] the [illegible] that has the least [illegible] rank [illegible]. For example, if you feel "The school's PHYSICAL FACILITIES" [illegible] factor that influences your teaching, [illegible] give this factor a rank of "1." If you feel [illegible] "CURRICULUM" is the second most [illegible] factor, give it a [illegible] of 2. Assign ranks from 1 to 13 to each factor according to how you feel it influenced your teaching this past year.

Task Two: Use 100 points to distribute among the factors. Points should be given to the factors according to the degree of their influence (either positive or negative) over your class-room teaching for the past school year. Factors that have more influence should be given more points. For example, if you feel "The school's PHYSICAL FACILITIES" carry about half of all the weight that affect your teaching, you would give about 50 points to "PHYSICAL FACILITIES." If you feel "SOCIAL ENVIRONMENT" does not influence your classroom teaching at all, you would give that factor 0 points. Be sure to use all 100 points.

Task Three: Indicate for each of the 13 areas the nature of its influence over your class-room teaching for the past school year. Use the key below:

1 = STRONG POSITIVE INFLUENCE
2 = MORE POSITIVE THAN NEGATIVE INFLUENCE
3 = MORE NEGATIVE THAN POSITIVE INFLUENCE
4 = STRONG NEGATIVE INFLUENCE
5 = EQUALLY POSITIVE AND NEGATIVE INFLUENCE
6 = NO INFLUENCE

For example, if you feel "The school's PHYSICAL FACILITIES" have a strong positive influence over your teaching, put a "1" in the box for that area.

Rank	Factors (Area)		
	PRINCIPAL in the school where you teach	_____ points	☐
	CENTRAL OFFICE ADMINISTRATIVE PERSONNEL (superintendent, asst. superintendent, etc.	_____ points	☐
	OTHER TEACHERS in your school	_____ points	☐
	PARENTS of the children in your class	_____ points	☐
	The CURRICULUM prescribed by the district	_____ points	☐
	TESTING PROGRAMS used to measure educational gains	_____ points	☐
	STATEWIDE MANDATES on certification, curriculum, grading, etc.	_____ points	☐
	The school's PHYSICAL FACILITIES	_____ points	☐
	The SOCIAL ENVIRONMENT of the community	_____ points	☐
	CURRICULUM PERSONNEL that came to your room, e.g., reading specialist, art teacher, psychologist, social services	_____ points	☐
	DIRECTOR of the Head Start or Follow Through Program	_____ points	☐
	PROGRAM ADVISOR who works most with you	_____ points	☐
	(For Teachers) - The TEACHING ASSISTANT (For Teaching Assistants) - The TEACHER	_____ points	☐

Points you assign should = 100 points

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